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# Implementation of the Port State Measure Agreement (PSMA) to combat IUU Fishing in the Philippines

Marilyn Labasan Jaal

**WORLD MARITIME UNIVERSITY**
Malmö, Sweden

# THE IMPLEMENTATION OF THE PORT STATE MEASURE AGREEMENT (PSMA) TO COMBAT IUU FISHING IN THE PHILIPPINES

By

**MARILYN LABASAN JAAL**
**Philippines**

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# Declaration

I certify that all the material in this dissertation that is not my own work has been identified and that no material is included for which a degree has previously been conferred on me.

The contents of this dissertation reflect my own personal views and are not necessarily endorsed by the University.

(Signature): Marilyn L Jaal

(Date): 20 September 2022

Supervised by: Professor Clive Schofield (Supervisor)
Professor Francis Neat (Co-Supervisor)

Supervisor's affiliation**:** WMU- Sasakawa Global Ocean Institute
World Maritime University

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# Abstract

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Unreported, unregulated, and illegal fishing (IUUF) is a worldwide issue that challenges the development of sustainable fisheries. IUU fishing is recognized in the Philippines as impeding national attempts to conserve and manage its fisheries resources. Several international instruments have been developed to tackle the program. Most of these are voluntary, but one in particular, the FAO's Port State Measures Agreement (PSMA), is legally binding. The PSMA entered into force in 2016 and is currently ratified by 72 parties worldwide, including the Philippines in 2018. The PSMA aims to stop the landing of IUU fish at the point of entry to the supply chain through a process of inspection and validation by the port state.

This study aimed to evaluate the Philippine government's readiness to implement the PSMA, focusing on human resources, capacity, and institutional requirements. A semi-structured interview approach was applied to understand the views and positions of seventeen officials from Philippine government institutions with a direct mandate for implementing the PSMA. These were the Bureau of Fisheries and Aquatic Resources (BFAR), the Philippine Fisheries and Development Authority (PFDA), and the Philippine Coast Guard (PCG).

The study results confirmed that the government agencies are all well aware of the problem of IUU fishing, but not all are familiar with the PSMA. However, several informants indicated they lacked sufficient training and capacity to implement all of the provisions of the PSMA. Therefore, this study concludes that the Philippine government should devote more time and effort to developing and strengthening the capacities of the institutional and human resources to implement the Port State Measure Agreement (PSMA) successfully.

***KEYWORDS:*** Port State Measure Agreement (PSMA), IUU Fishing, institutional capacities, human resource capacities

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# List of Abbreviations

| | |
|---|---|
| ASEAN | - Association of South East Asian Nations |
| BFAR | - Bureau of Fisheries and Aquatic Resources |
| CTA | - Coral Triangle Agreement |
| CTI-CFF | - Coral Triangle Initiative on Coral Reefs, Fisheries and Food Security |
| DA | - Department of Agriculture |
| DOF | - Department of Fisheries |
| DOTr | - Department of Transportation |
| DFPC | - Davao Fish Port Complex |
| EAGA | - East Asia Growth Area |
| EEZ | - Exclusive Economic Zone |
| FIMS | - Fisheries Information Management System |
| FFA | - Fisheries Forum Agency |
| FFID | - Fish Quarantine and Fish Vessel Inspection Division |
| FFMD | - Fisheries and Fleet Management Division |
| GSFPC | - General Santos Fish Port Complex |
| IPAO-IUUF | - International Plan of Action on Illegal, Unreported and Unregulated Fishing |
| IUUF | - Illegal, Unreported, Unregulated Fishing |
| MCS | - Monitoring, Control and Surveillance |
| MOA | - Memorandum of Agreement |
| MIMRA | - Marshal Islands Marine Fisheries Authority |
| NCC | - National Coordinating Committee |
| NGA | - National Government Agency |
| NPAO-IUUF | - National Plan of Action on Illegal, Unreported and Unregulated Fishing |
| OSAC | - One-Stop Action Center |
| PCG | - Philippine Coast Guard |
| PEMSEA | - Partnerships in Environmental Management for the Seas of East Asia |
| PFDA | - Philippine Fisheries and Development Authority |
| PSA | - Philippine Statistics Authority |
| PSMA | - Port State Measure Agreement |
| RFMO | - Regional Fisheries Management Organizations |
| SEAFDEC | - Southeast Asian Fisheries Development Center |
| SCS | - South China Sea |
| SDS-SEA | - Sustainable Development Strategy for the Seas of East Asia |
| SOP | - Standard Operating Procedure |
| UNCLOS | - United Nations Convention On the Law of the Sea |
| UN-FAO | - United Nations- Food and Agriculture Organization |
| USAID | - United States Agency for International Development |

## SECTION 1. INTRODUCTION

Illegal, Unreported, and Unregulated (IUU) fishing is currently one of the most significant ocean and maritime issues facing the world community (Bacalso et al., 2016). In the same way, the United Nations has called IUU fishing as one of the biggest global maritime risks because it has a big effect on the marine environment and the coastal people who depend on fisheries for their livelihood (Chapsos et al., 2019). As a result of the illegal and frequently murky nature of such activities, it is intrinsically difficult to estimate the true scope of IUU fishing. However, the Food and Agriculture Organization of the United Nations (FAO) estimates that IUU fishing accounts for between 11 and 26 million tons of yearly catch and is anticipated to cost the world economy of US$10-23 billion annually, with developing countries taking the burden of the loss (UN-FAO, 2022). These activities have a negative impact on the livelihoods of fishermen and other stakeholders in the fishery sector, as well as exacerbating poverty and food insecurity; and is also considered one of the most major dangers to marine ecosystems (Lepardo et al., 2017).

In the Philippines, IUU fishing remains one of the most serious barriers to sustainable fisheries. The Philippines has enacted the Fisheries Code of 1998 as amended by Republic Act No. 10654 entitled, “An Act to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing” (Philippines, 2014). According to this code, Illegal fishing refers to fishing practices that violate applicable rules and regulations, including international treaties and conventions (Philippines, 2014). Unreported fishing, on the other hand, refers to actions that have not been reported or have been misreported to the relevant national authority or regional organization in violation of applicable rules and regulations (Philippines, 2014). Meanwhile, unregulated fishing implies fishing in areas or for fish species where conservation or management procedures do not exist (Philippines, 2014).

The UN-FAO has developed international instruments to address IUU fishing. The Port State Measure Agreement was included as a crucial component in the IPAO-IUU fishing protocol, which was adopted in 2001 as part of the FAO Code of Conduct for

Responsible Fisheries; it was the world's first legally binding international treaty aimed at preventing, deterring, and eliminating IUU fishing. The PSMA was ratified and came into force on June 5, 2016. Its main goal is to stop IUU fishing by making it impossible for illegal fishing vessels to use ports and bring in their catch.

Effective implementation of the PSMA will help fight illegal fishing cost-effectively and efficiently, protect the livelihoods of legal fishers, strengthen flag states' control over their fishing vessels, encourage practical cooperation and information sharing between coastal states, flag states, and regional fisheries management organizations and arrangements, stop "ports of non-compliance," and contribute to stronger fisheries (UN-FAO).

Recently, the Philippines acceded to the PSMA, although to date there are no published studies on how the PSMA is being implemented in the Philippines. This article aims to fill this gap in the literature. It outlines the maritime context and importance of fisheries to the Philippines prior to examining the challenges that IUU fishing poses for the Philippines as well as the Philippines' efforts to combat IUU fishing. In particular the evaluation is made of the critical provisions of the PSMA and examine how prepared the Philippines is to implement it in practice and the challenges the country faces. The research draws on primary data collected from informants from government agencies including the Bureau of Fisheries and Aquatic Resources, the Philippine Coast Guard, and the Philippine Fisheries Development Authority.

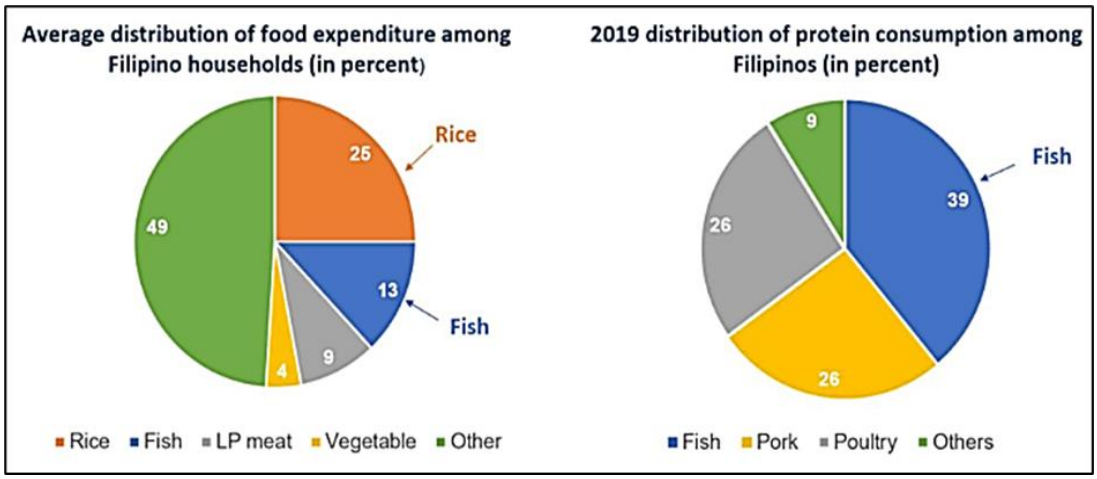
## SECTION 2. CASE STUDY: THE PHILIPPINES

### 2.1 The Philippine Geographical and Marine Features

The Philippines is a Southeast Asian archipelago positioned between the South China Sea and the larger Pacific Ocean (Britannica, 2022). It is made up of 7,641 islands, with a total coastline length of 36,289 kilometers, a land area of 300,000 square kilometers, and a total area of marine waters, including the Exclusive Economic Zone, of 2,200,000 square kilometers (Seafdec, 2022). Furthermore, the Philippines is located within the coral triangle, which has been identified as the world's center of tropical marine biodiversity (Carpenter & Springer, 2005). The country's fishing industry, which depends on these tropical and very productive seas, brings in between 1.5 and 1.7 percent of the country's GDP (Lamarca, 2017) and employs about 1.6 million people (Philippine Statistics Authority, 2022).

Fisheries are important to food security in the Philippines since they account for an average of 13% of food expenditure and 39% of protein consumption among Filipino households, as shown in Figure 1 (Garchitorena & Po, 2022). With an estimated yearly fish catch of 4.65 million metric tons, it is one of the top fishing nations in the world, contributing about $4.33 billion to the country's GDP (Philippine Ocean, 2015). The Philippines ranked seventh in the world in fish output in 2014, according to the FAO study. But because poverty has stayed in the Philippines and the population has grown to 112,917,000 (PSA, 2022), there is an urgent need to make sure there is enough food to feed everyone.

**Figure 1.**
*Distribution of Food and Protein Consumption*




**Source:** *Report from Garchitorena, E. D. and Po, Caterina Maria (Bussiness World, 2022)*

Based on recent research by USAID and the Bureau of Fisheries and Aquatic Resources, IUU fishing in the Philippines accounted for between 27 and 40 percent of all fish taken in 2019 which is equal to around 1.09 billion US dollars in annual losses. This indicates that law-abiding fishermen lost a minimum of 735 million US dollars' worth of seafood to illegal fishermen. Annually, it is estimated that between 516,000 and 716,000 metric tons of fish are caught by illegal fishing, whereas between 274,000 and 422,000 metric tons of commercial fish catch are not reported to the BFAR. According to the report, between 80,000 to 125,000, or around 30 percent, of municipal fishing vessels remain unregistered. It is therefore clear that IUU fishing is a major loss of revenue and a cause of overfishing and fish stock depletion. Municipal fishermen that are, small-scale artisanal or traditional fishermen using vessels of 3 gross tonnages or less are especially vulnerable to the impacts of IUU fishing (Smith et al, 1980). Indeed, they comprise one of the country's poorest and most vulnerable sectors and are most affected by these activities. In nations like the Philippines, where fish is a crucial source of protein and livelihoods, illegal, unreported, and unregulated (IUU) fishing seriously undermines the ability of citizens to put food on the table (Biodiversitylinks, n.d.).

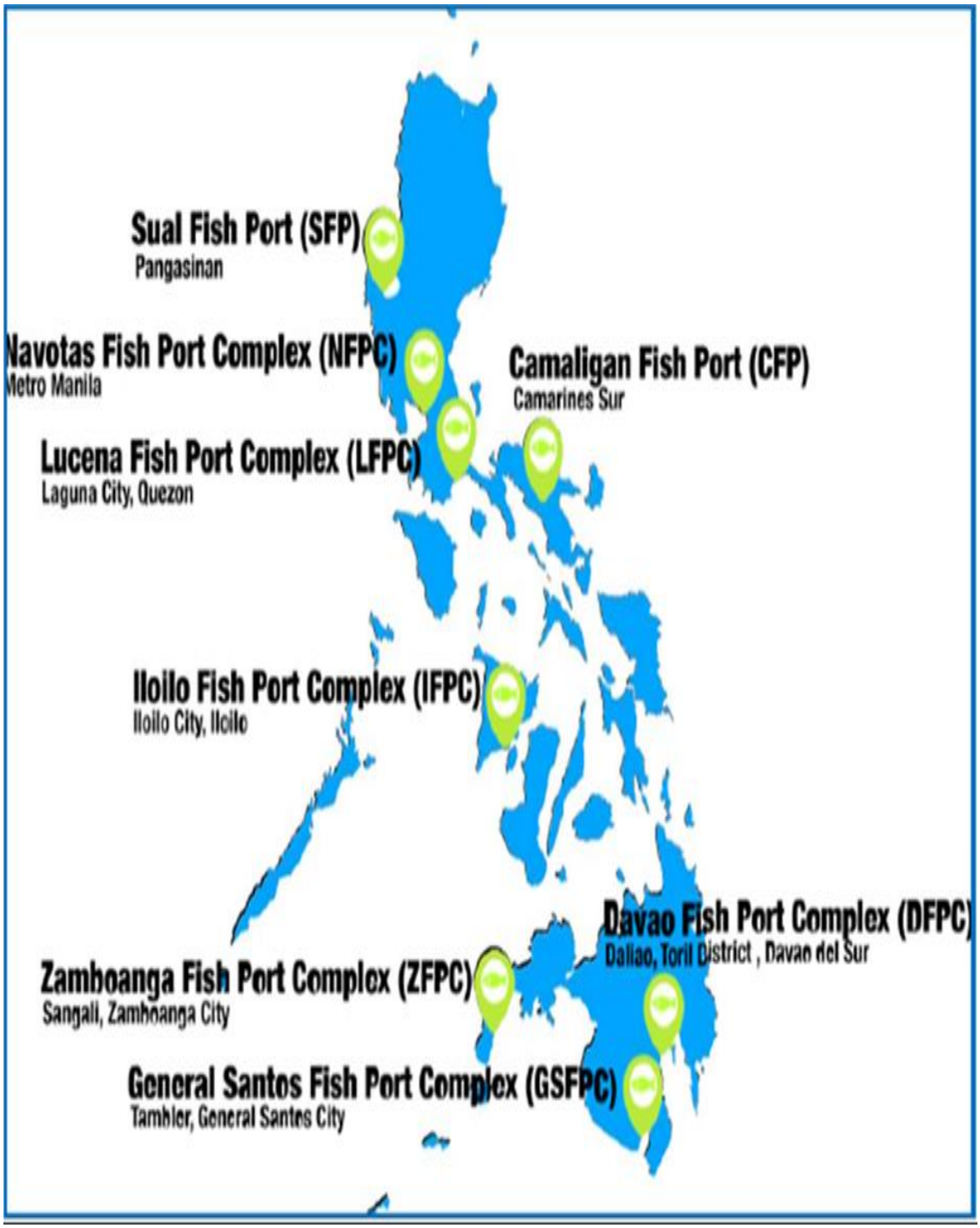
Specifically, based on the IUU Risk Intelligence Report of 2020 Philippines-Country Report, there are foreign-flagged fishing vessels operating in neighboring countries that have landed illegal catches at the General Santos Fish Port Complex, the Philippines' tuna capital (Pramod, 2022). In 2014, the highest yield in the previous twelve years was 193,867 MT, with 53 percent of frozen tuna imports, 77 percent foreign, and 23 percent from Manila (the Philippines' capital city) suppliers. Most of these landings are from distant places like the Celebes Sea, waters in the vicinity of the Indonesian archipelago, the Pacific, and Papua New Guinea. However, due to a lack of relevant data and policies, the fishing industry in General Santos City has been identified as a source of concern for IUU fishing, resulting in issues in three areas: fisheries assessment, management, and compliance (Lepardo et al., 2017). Furthermore, it is evident that a large portion of the fishing that takes place inside the marine authority of the Philippines is simply not noticed.

Furthermore, similar reports from the IUU Risk Intelligence Report 2020 involving illegal high seas fleet fishing, such as foreign tuna longlines vessels of Taiwanese and Japanese nationals that lack adequate monitoring, have been reported and landed in Davao City, Philippines, with no specific data on the percentage of vessels inspected by BFAR to ensure their validity and traceability of origin available. Nevertheless, the highest yield in the previous twelve years was 193,867 MT in 2014, including 53 percent frozen tuna imports, 77 percent foreign, and 23 percent from Manila (capital city of the Philippines) suppliers.

### 2.1.1 Major Fish Ports

The eight (8) major fish ports in the Philippines that are overseen by the Philippine Fisheries Development Authority (PFDA) are shown in Figure 1. Only the General Santos Fish Port Complex (GSFPC) and the Davao Fish Port Complex (DFPC) serve international fishing vessels, as well as commercial fishing subsectors and landing quays mostly for local fishing vessels.

**Figure 2.**
*Major Fish Ports in the Philippines*




**Source:** *http://www.seafdec.org/country-fisheries-trade-philippines/ (PFDA website, 2019)*

According to the PFDA, the GSFPC is the second largest fish port in the Philippines, next to the Navotas Fish Port Complex in Metro Manila. It covers an area of 32 hectares and lies along the shores of Sarangani Bay, located at Brgy. Tambler, General Santos City, in South Cotabato. It is known as the "Tuna Capital of the Philippines" due to its continued leadership in fishing landing volume, specifically of tuna and tuna-like species; in 2019, it recorded the highest fish landing in the country for the past ten years with 143,316 MT, of which 92 percent, or 132,211 MT, were yellowfin tuna and tuna-like species; and because it is home to six (6) tuna canning operations in the Philippines. General Santos City is close to tuna-rich fishing regions in the Sulu Sea, Moro Gulf, and the Celebes Sea. Due to the high value of tuna, this is a high-risk area for IUU fishing (Seafdec, 2020).

Likewise, the Davao Fish Port Complex (DFPC) is the seventh commercial fish port operated by PFDA. It is the second major fish port complex established and located in the Mindanao area, next to the General Santos Fish Port Complex. It is situated in Daliao, Toril District, Davao City (Figure 1). Based on the PFDA reports, DFPC serves as a center for the collection, processing, storage, and packaging of fishery and other marine products for distribution to domestic and export markets; and it is an alternative transshipment port in the Asia-Pacific Region, especially for long-line foreign fishing vessels. Also, DFPC has been named a trade hub in the East Asia Growth Area (EAGA) because it is one of the most advanced facilities for processing commercially caught fish in the Mindanao Region.

## 2.2 The Philippine Maritime Jurisdiction

The Philippines signed the United Nations Conventions on the Law of the Sea (UNCLOS) (United Nations, 1982) on December 10, 1982, shortly after it was opened for signature, and ratified the Convention on May 8, 1984 (United Nations, 2022).

### 2.2.1 Baselines

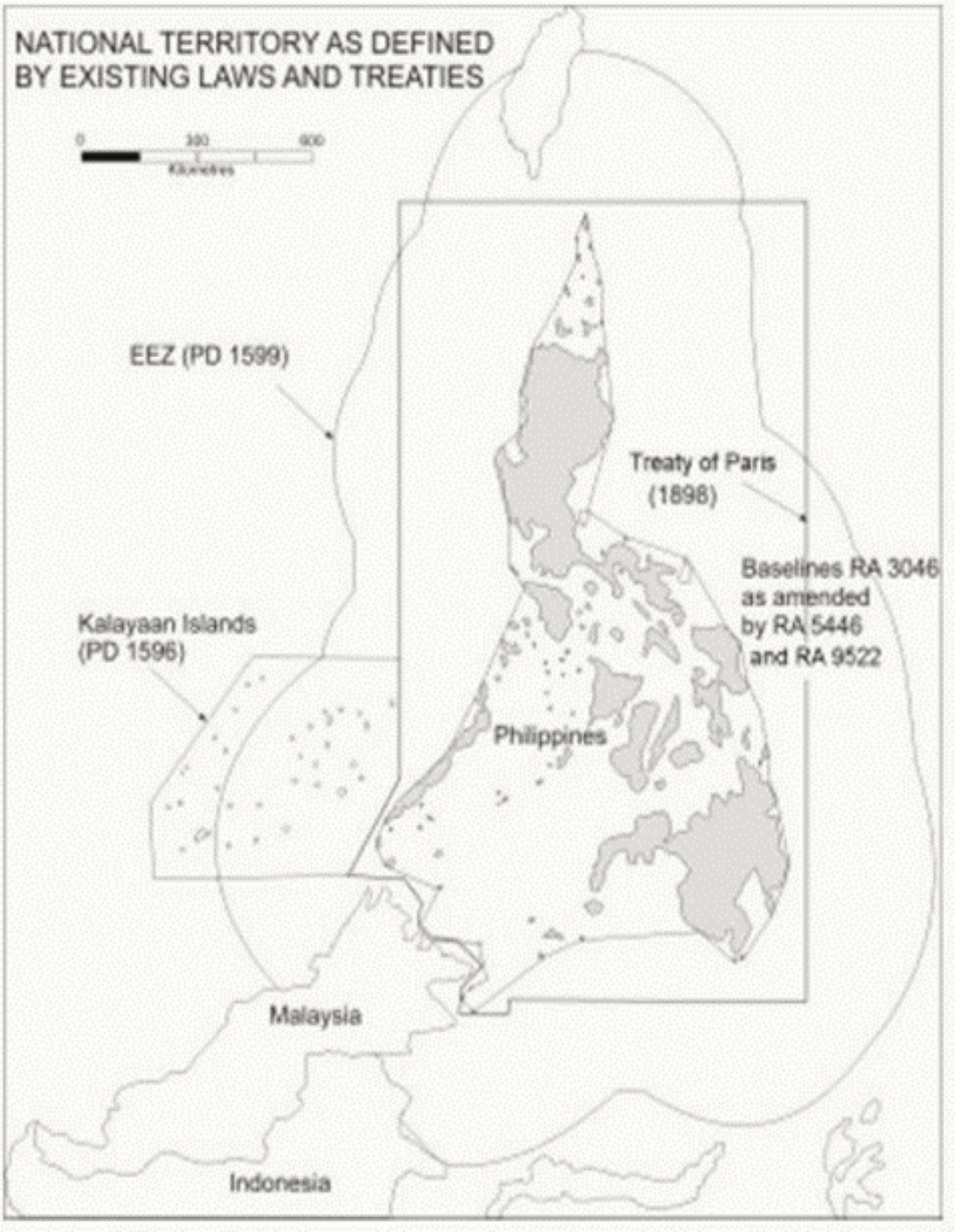
Baselines serve as the foundation for measuring a country's zones of maritime jurisdiction and often serve as the basis for establishing maritime boundaries with

other coastal states (Garcia, 2009), with each zone having corresponding rights (Lumba, 2009). In the context of the Philippines, there were several pieces of baseline legislation before it was in line with the Law of the Sea Convention in 2009. The Philippine Baseline Law (Republic Act No. 3049), which was changed in 1968 by RA No. 5446, "An Act to define the baselines of the Philippine Territorial Sea" (Philippines, 1961), was essential. This claim to baselines was not in compliance with Article 47 of UNCLOS dealing with archipelagic baselines as it referred to “straight baselines” rather than archipelagic baselines. Further, this 1961 legislation defined a baseline segment across the Moro Gulf measuring 141 nautical miles, which exceeded the 125 nautical mile limit to individual archipelagic baseline segments laid down in Article 47(2) of UNCLOS.

Eventually, the new Philippine Baseline Law of 2009 (Republic Act No. 9522) technically adjusted the baselines and basepoints into enclosing the central archipelago to keep with Article 47 of UNCLOS (Philippines, 2009a). Additionally, this revised baseline legislation considered only the Scarborough Shoal and Kalayaan Island Group as a regime of islands (Philippines, 2009a) (Figure 1). This new baseline law complies with UNCLOS and reaffirms the Philippines’ commitment to the ASEAN-China Declaration on the Code of Conduct in the South China Sea. ASEAN and China have reiterated the importance of promoting a peaceful, pleasant, and harmonious environment in the South China Sea.

As a result, the parties agree to settle their territorial and jurisdictional disputes amicably, without threatening or using force. The parties also agree to step up their efforts to foster mutual respect and collaboration, as well as trust and confidence within and between themselves. They reiterated that a code of conduct for the South China Sea would help keep peace and stability in the region.

**Figure 3.**
*The Philippine Territory*




**Source:** *The Philippines Treaty Limits and Territorial waters claim in International Law*

### 2.2.2 Overlapping Maritime Claims

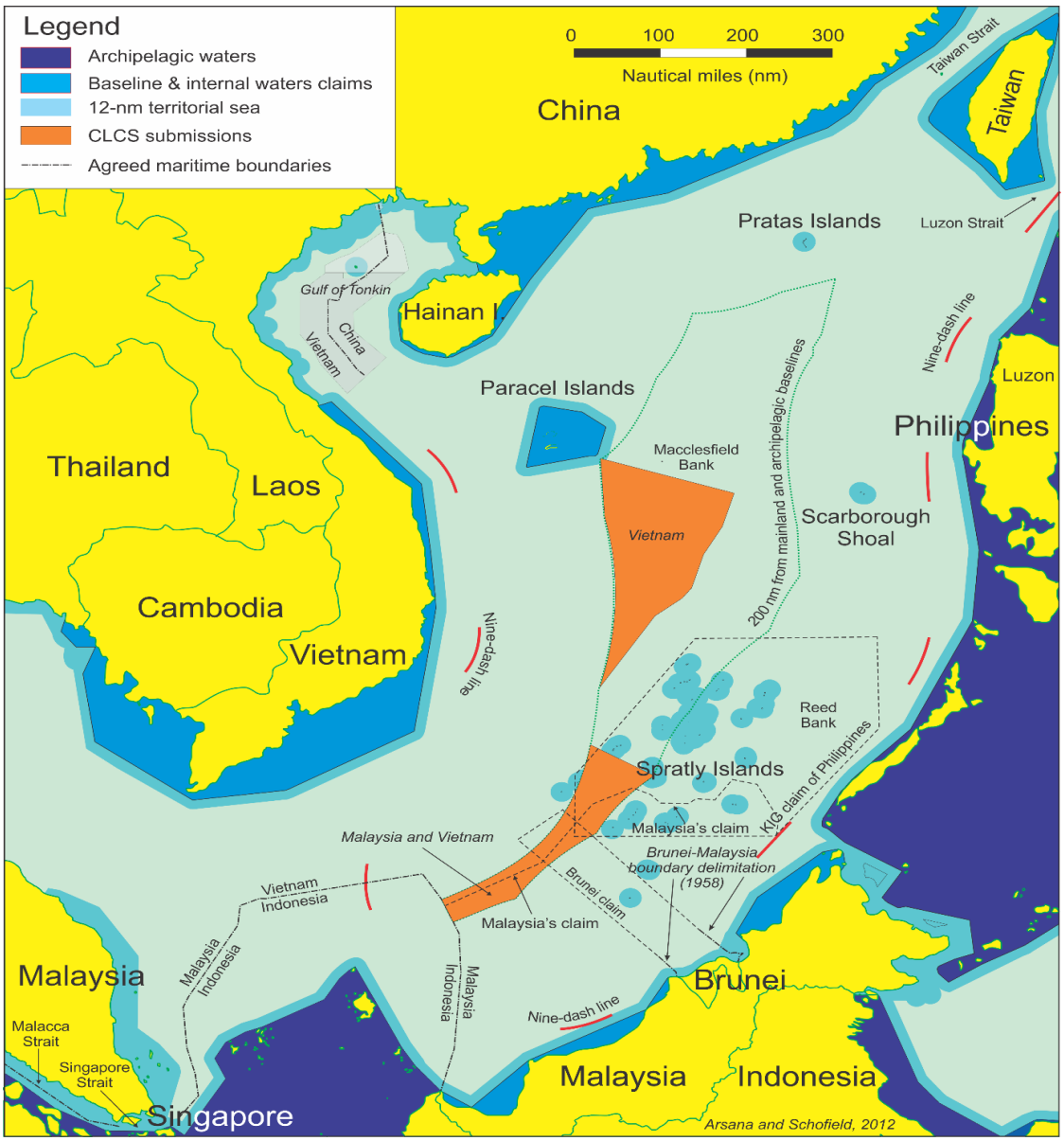
The South China Sea is a vast semi-enclosed ocean zone encompassed by China, Taiwan, the Philippines, Malaysia, Brunei, Singapore, Indonesia, and Vietnam. Cambodia and Thailand are located along its Gulf of Thailand extension. It has an area of about 1.2 million square miles (Schofield & Storey, 2009). As seen in Figure 1, the vast majority of this region is subject to rival sovereignty claims due to its complex geography, numerous small islands, islets, rocks, and coral reefs, and the extension of these features. The South China Sea is important because it plays a significant role in sea trade. More than 40,000 ships pass through it every year, which is about 40 percent of the world's sea trade. It is thought that large untapped oil and gas deposits lie on the ocean floor (Morton, 2016).

Furthermore, other SCS claimants, such as Vietnam and Indonesia, rely on fishing for 35.3 percent and 57.3 percent of total animal protein consumption, respectively (Greer, 2022). The SCS is a critical element of the fishing industry in the Philippines, accounting for 2.7 percent of the national GDP. However, by the 1980s, IUU fishing had rapidly declined in fishery resources in the SCS (Li & Amer, 2015). It was also stated that sovereignty conflicts and overlapping claims to marine zones in the SCS affect the efficiency of an individual or collective coastal state's activities and the goals of RFMO conservation and management initiatives. There are a lot of fish stocks in the SCS, but they are being overfished and depleted because of competing and overlapping maritime claims (Sumalia & Cheung, 2016).

Relative to the 2016 Award of the Arbitral Tribunal in favor of the Philippines against China, it is regarded as part of the history of international law and a significant resource for nations with similar problematic maritime characteristics. The arbitral ruling assisted in minimizing and drastically reducing the areas of dispute in the South China Sea and provided a foundation for the delimitation of overlapping maritime zones. In addition, it specifies further the EEZs under national jurisdiction for fishing activities, thereby enhancing the potential for improved management of marine living resources in the SCS (Nguyen, H.T. & Nguyen, T. L. H., 2021). The PSMA, on the other hand, would not have a direct effect because it is mainly used in ports.

In addition to territorial claims, global trade, and conflict, the social and economic differences between countries in the region lead to a high level of poverty, which is a cause of illegal fishing and piracy in the SCS, negatively affecting the security of the area (Dryad Global, n.d.)

**Figure 4.**
*The South China Sea*




**Source:** *IMA Arsana and CH Schofield in R Beckman and CH Schofield, 'Defining EEZ Claims from Islands: A Potential South China Sea Change', (2014) 29(2), The International Journal of Marine and Coastal Law, 193-243, at 199.*

## 2.3 Regional Ocean Governance

This section talks about the different regional ocean governance organizations, of which the Philippines is a member. These organizations try to protect the ocean environment, promote the sustainable use of marine and coastal resources, and keep the ocean's biological diversity by ensuring that policies, activities, and concerns related to the ocean are all put into place simultaneously.

### 2.3.1 Coral Triangle Agreement (CTA)

The western Pacific Ocean's Coral Triangle is a hotspot for marine biodiversity (Cabral et al., 2012). The "CT6" refers to the six nations: Indonesia, the Philippines, Malaysia, Papua New Guinea, the Solomon Islands, and Timor Leste that make up this roughly triangular region in tropical waters. Compared to South America's Amazon rainforest, the CT, known as the "Amazon of the Seas," spans 5.7 million square kilometers (2,200,000 square miles) of ocean water. Six of the seven marine turtle species live there, along with more than 2,000 species of reef fish and over 600 different types of coral that construct reefs. With a US$12 billion nature-based tourism business each year, it sustains the livelihoods of more than 120 million people and provides food to coastal communities (WWF website).

However, the Coral Triangle is threatened by various concerns, including overfishing, damaging fishing methods, a growing population, and the consequences of climate change (World Economic Forum, 2018). Thus, in 2009, the leaders of the six nations launched the Coral Triangle Initiative on Coral Reefs, Fisheries, and Food Security (CTI-CFF) to bring together relevant governments in multilateral partnerships to manage and sustain the marine ecosystem, encourage responsible industries such as fishing and tourism, enhance the effectiveness of protected and managed areas, and improve the positive effects on society and the economy of conserving marine resources (Veron et al., 2011).

In 2009, the Philippine CTI-CFF National Coordinating Committee (NCC) was formed. The NCC was the driving force behind the adoption of the standardized Management Effective Assessment Tool. The method is commonly used to assess the efficacy of

marine protected area management. Also, the NCC has led multi-stakeholder processes for the Department of Environment and Natural Resources and the Bureau of Fisheries and Aquatic Resources to develop and implement regional and national initiatives (MEA-BMB, 2022).

### 2.3.2 Association of South East Asian Nations (ASEAN)

The Association of South East Asian Nations (ASEAN) was started on August 8, 1967, in Bangkok, Thailand, when Malaysia, the Philippines, Singapore, Thailand, and Indonesia signed the ASEAN Declaration (Bangkok Declaration). Brunei, Vietnam, Cambodia, Laos, and Myanmar joined in 1984, 1995, 1993, and 1997, giving ASEAN a total of ten member countries (ASEAN, 2020).

In 2003, the ASEAN Leaders established the ASEAN Community, which consists of three pillars, namely the ASEAN Security, Economic, and Socio-Cultural Communities, to create a peaceful, stable, and resilient region within the global community of nations while preserving the centrality of ASEAN. The objective of the ASEAN Political-Security Community (APSC), the first pillar, is to preserve regional peace and a just, democratic, and harmonious environment. Second, the ASEAN Economic Community (AEC) should be the final aim of economic integration measures as a unified market and production base with equitable economic development and full global integration. Lastly, the ASEAN Socio-Cultural Community (ASCC) wants to help disadvantaged groups and the rural population reach their full potential and improve their quality of life. It will try to get everyone involved, especially women, young people, and local communities (ASEAN, 2003).

### 2.3.3 Southeast Asian Fisheries Development Center (SEAFDEC)

The Southeast Asian Fisheries Development Center (SEAFDEC) is an independent intergovernmental agency founded in 1967 to protect the sustainability of Southeast Asian fisheries and aquaculture, it aims to "promote and encourage joint operations among member nations." Brunei Darussalam, Cambodia, Indonesia, Japan, Laos,

Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam are the eleven (11) member states (SEAFDEC, 2022).

In 1973, the Philippines formed the SEAFEC Aquaculture Department to conduct research and develop the technology. Disseminate knowledge and educate individuals. The Philippines supports AQD with physical buildings, operational finances, and researcher, scientist, and service employee wages. Strong ties exist between AQD and foreign research and academic institutes, as well as international organizations. AQD operations are overseen by the Philippine Technical and Administrative Committee for SEAFDEC under the Department of Agriculture (Ledesma, 2021).

#### 2.3.4 Partnerships in Environmental Management for the Seas of East Asia (PEMSEA)

The PEMSEA was established through the 2006 Haikou Partnership Agreement as the region’s coordinating mechanism for implementing the Sustainable Development Strategy for the Seas of East Asia (SDS-SEA). It is an intergovernmental organization operating in East Asia to foster and sustain healthy and resilient oceans, coasts, communities, and economies across the region. This organization has partners from Cambodia, China, North Korea, Indonesia, Japan, Laos, the Philippines, South Korea, Singapore, Timor-Leste, and Vietnam (PEMSEA, n.d.).

PEMSEA aided the Philippines in developing ICM initiatives for sustainable coastal and marine environmental development and resource management in 2013. Over five years, the program aimed to develop and execute efficient ICM programs in collaboration with local governments, covering more than 20% of the country's coastline. In addition, in 2015, the Philippine government signed the Da Nang Compact with eleven other East Asian countries, pledging to expand ICM to include 25% of the region's coastline. This compact supports the UN-SDGs and other relevant international and regional commitments related to coasts and oceans (PEMSEA-Philippines, n.d.).

## 2.4 The Philippine Efforts to Suppress IUU Fishing

As highlighted in the introductory section, IUU fishing represents both a major global challenge and a high priority for the Philippines specifically; yet, the Philippines face the same challenges and it is one of the government's primary concerns at present.

Based on the joint report of the Bureau of Fisheries and Aquatic Resources (BFAR), USAID, and the University of Rhode Island, the impacts of IUU fishing in the Philippines have been estimated as follows:

a) Illegal Fishing by both municipal and commercial fisheries takes placed at 27%-40% or estimated valued at P42-63 billion (Philippine Peso) of Philippine capture fisheries production in 2019;
b) Unreported Catch by commercial fishers' ranges from 274,000 to 422,000 metric tons per year; and
c) Unregistered Fishing vessels are estimated to be as many as 1,600 to 2,700.

The following sub-sections identify the key agencies in the Philippines which have direct responsibility for combatting IUU fishing and briefly outline their efforts to address the challenges in doing so. It can be noted here that the interviewees for this research were drawn from these three crucially important organisations (see Section 4).

### 2.4.1 The Bureau of Fisheries and Aquatic Resources (BFAR)

Based on the government structure of the Philippines, the Department of Agriculture oversees the BFAR. The Philippine Fisheries Code of 1998, updated by Republic Act No. 10654, "An Act to Prevent, Deter, and Eliminate Illegal, Unreported, and Unregulated Fishing", the law that governs the DA-BFAR (Philippines, 2014).

The BFAR may adopt policies and regulations, such as the Fisheries Administrative Orders, the Draft Philippine National Plan of Action-IUU, and the Philippine Tuna Management Plan, required to carry out its objectives. The BFAR may also directly implement programs established under department policies and plans. In addition to

developing national policy, BFAR has the authority to use specific powers that could help fight IUU fishing, such as outlawing IUU fishing practices, implementing all laws and guidelines about the preservation and supervision of fisheries resources, and imposing administrative fines against fisheries violations. The Philippine Fisheries Code of 1998, as updated by Republic Act No. 10654, gives BFAR the power to do several things to close legal and policy gaps in the Philippines and fight IUU fishing effectively.

The Philippine government has made a long-standing commitment to fighting IUU fishing. The Philippine Fisheries Code, also known as "The Philippine Fisheries Code of 1998 (Philippines, 1998) as revised by Republic Act No. 10654," An Act to Prevent, Deter, and Eliminate Illegal, Unreported, and Unregulated Fishing (Philippines, 2014)," now serves as the legislative framework for the government since its approval on February 27, 2015. This code aims to stop IUU fishing in Philippine waters, including other waterways over which the Philippines has sovereignty and jurisdiction, as well as the country's 200 nautical mile Exclusive Economic Zone (EEZ) and continental shelf; all aquatic and fishing resources, whether in inland, coastal, or offshore fishing regions, including, but not limited to, fishponds, fish pens/cages; and all land designated for aquaculture.

### 2.4.2 The Philippine Fisheries Development Authority (PFDA)

The PFDA is governed by Executive Order No. 772, "Amending Presidential Decree No. 977, Creating the Philippine Fish Marketing Authority, defining its functions and powers, and for other purposes," issued on February 8, 1982 (Philippines, 1982).

The PDFA is a government-owned and managed organization that works directly with the Department of Agriculture (DA). It was established to support the expansion of the fishing sector by offering post-harvest infrastructure facilities, such as fish ports, fish markets, and necessary services that facilitate the handling, distribution, and improvement of the quality of fish and fishery products (Philippines, 1982).

Currently, the PFDA operates three fundamental programs: Regional Fish Ports (RFPP), Municipal Fish Ports (MFPP), and Ice Plants and Cold Storage Programme (IPCSP). The RFPP mandates the establishment and operation of fish port complexes in strategic fish landing centers throughout the Philippines. Breakwaters, landing quays, market halls, refrigeration and processing facilities, slipways, and other structures are present in these ports. The MFPP, on the other hand, addresses the post-harvest needs of subsistence fishermen, which include smaller fish landings and market facilities in selected fishing zones. Additionally, several fishing centers provide ice plants and cold storage (Philippines, 1982).

The PFDA in charge of port facilities may also provide BFAR with information on suspected IUU fishing vessels in ports. In addition, through its legal duties and programs, the PFDA can raise awareness among producers, brokers, processors, retailers, and consumers about the problems of doing business with illegal fishermen (Philippines, 1982).

### 2.4.3 The Philippine Coast Guard

The Philippine Coast Guard (PCG) is governed by Republic Act No. 9993, "An Act Establishing the Philippine Coast Guard as an Armed and Uniformed Service Attached to the Department of Transportation (DOTr), and for Other Purposes." It replaces Republic Act No. 5173, as amended (Philippines, 2009b).

One of the PCG's mandates, in coordination with the BFAR, is to assist in enforcing fishing and other related laws within the Philippines' maritime jurisdiction. Accordingly, the PCG shall help prevent and suppress illegal fishing or violations of fishing regulations, unlawful harvesting of corals and other marine products, illegal entry, and violations of other maritime laws that may occur within the maritime jurisdiction of the Philippines (Philippines, 2009b).

In this regard, the BFAR has an existing agreement with the PCG to provide the manning needed for BFAR vessels engaged in anti-illegal fishing operations and patrols within the Philippine maritime jurisdiction. The Memorandum of Agreement

(MOA) improves and makes more efficient and effective fishing and marine regulations, especially those that deal with the management, conservation, development, and preservation of the country's maritime environment, fisheries, and aquatic resources (MOA PCG-BFAR, 2019).

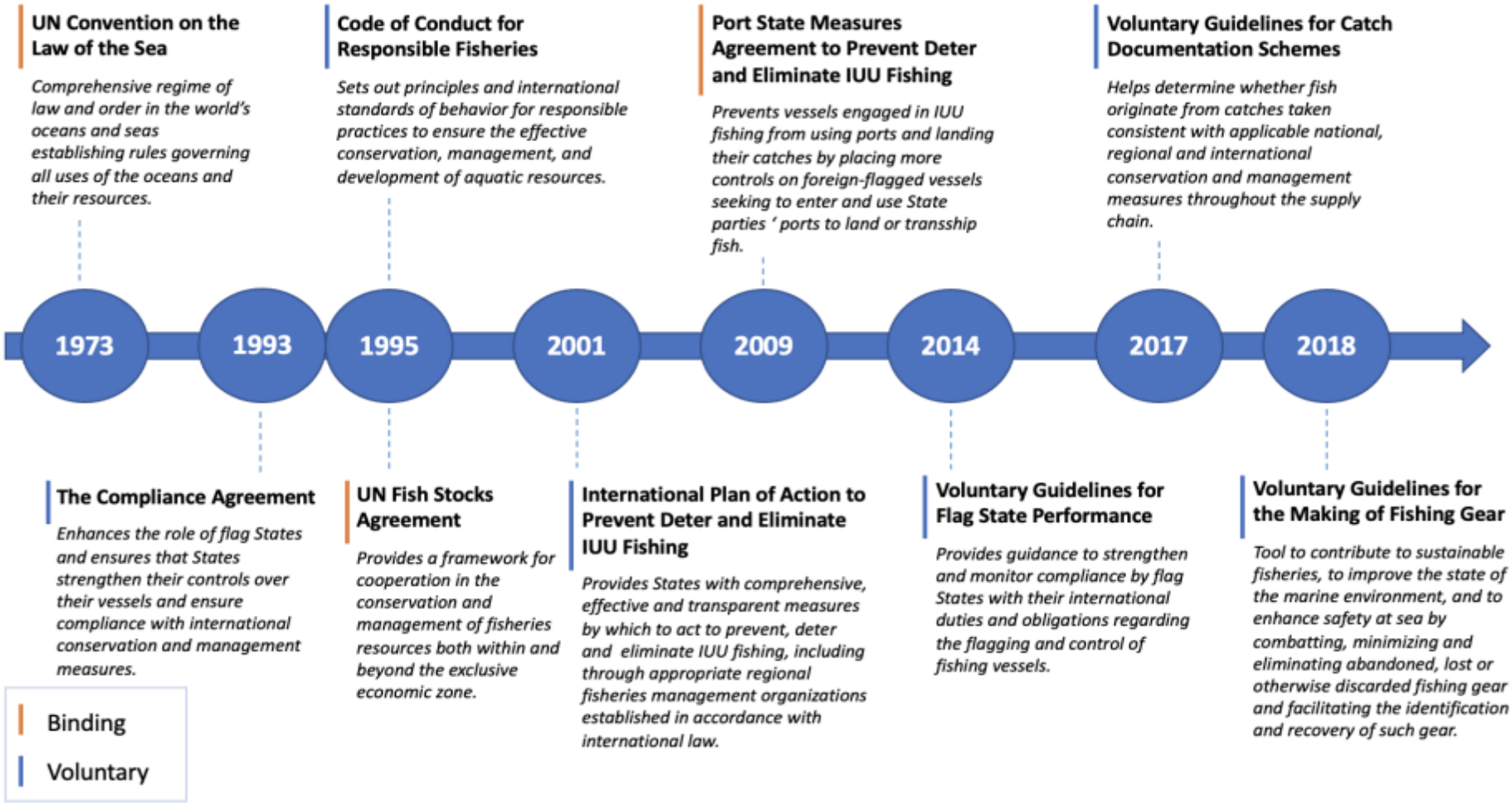
## SECTION 3. THE PORT STATE MEASURE AGREEMENT (PSMA)

### 3.1 Evolution of PSMA

The early groundwork of port State measures in international fishing instruments began with the 1982 United Nations on the Law of the Sea (Doulman & Swan, 2012), a 14-year-old landmark text known as the "Constitution for the Ocean" (Koh, 1982). Since then, several binding and non-binding fishing instruments have been concluded, and IUU fishing and port state measures have become increasingly covered and significant (Gouache, 2021). *Figure 5* shows how international agreements about illegal, unreported, and unregulated fishing have changed.

The United Nations Food and Agriculture Organization approved the Port State Measure Agreement (PSMA) in 2009 as the first binding agreement to combat IUU fishing (UN-FAO, 2016). The agreement aims to prevent, deter, and eliminate IUU fishing and prevent unlawfully caught fish from reaching global markets (Gouache, 2021). It came into force on June 5, 2016, and its primary objective is to stop IUU fishing by prohibiting illegal fishing vessels from using ports or landing their catch (UN-FAO, 2016). If implemented properly, the agreement has the potential to aid in the long-term preservation and sustainable use of the marine ecosystem. However, for the agreement to be effective, it must be accompanied by a thorough implementation toolkit that recognizes and addresses the capacity requirements of the implementing states. Under the terms of the agreement, states would conduct routine inspections, international fishing vessels would need special docking clearance, and networks for exchanging information would be built (Agoes, 2011).

**Figure 5.**
*Binding and Voluntary International Instruments on IUU Fishing*




*Binding and Voluntary International Instruments on IUU Fishing - Source: Author's own.*

***Source:*** *Gouache, C. (2021). Proposed Guidelines on Pre-Arrival Risk Assessments of Foreign Vessels: Using Lessons Learned to Strengthen Implementation of the UN FAO Agreement on Port State Measures. https://escholarship.org/content/qt8091w57h/qt8091w57h.pdf*

### 3.2 How Does the PSMA Work?

Port State Measures are instruments or requirements enacted by port states that foreign fishing vessels must adhere to in order to access their ports. These typically include provisions for advance port entry notification, the use of designated ports, limits on fish landing and transshipment, rules about supplies, documentation requirements, and port inspections, in addition to actions such as listing IUU vessels and trade-related actions and sanctions (Agoes, 2011).

According to a report by the PEW Charitable Trusts (2017), Figure 6 illustrates how the PSMA operates, and the role of the port state in curbing IUU fishing is stated as follows:

- Port officials evaluate the vessel's report and all other available information to assess if the vessel may have engaged in IUU fishing or fishing-related activities supporting IUU fishing before deciding whether to permit or deny the vessel's admission into port.
- If the vessel is permitted to enter the port, the port state will have authority over it.
- A vessel shall not be allowed to land or transship its catch or use the port's facilities if there are reasonable grounds to suspect that the vessel has engaged in IUU fishing when it arrives.
- The vessel must be denied permission to land or transship its catch and use the port under the following circumstances:

    1) If the port state determines that a vessel does not have a valid flag state or coastal state permit to engage in fishing or fishing-related activities,

    2) If the port state receives evidence that the fish onboard was taken in violation of coastal state requirements,

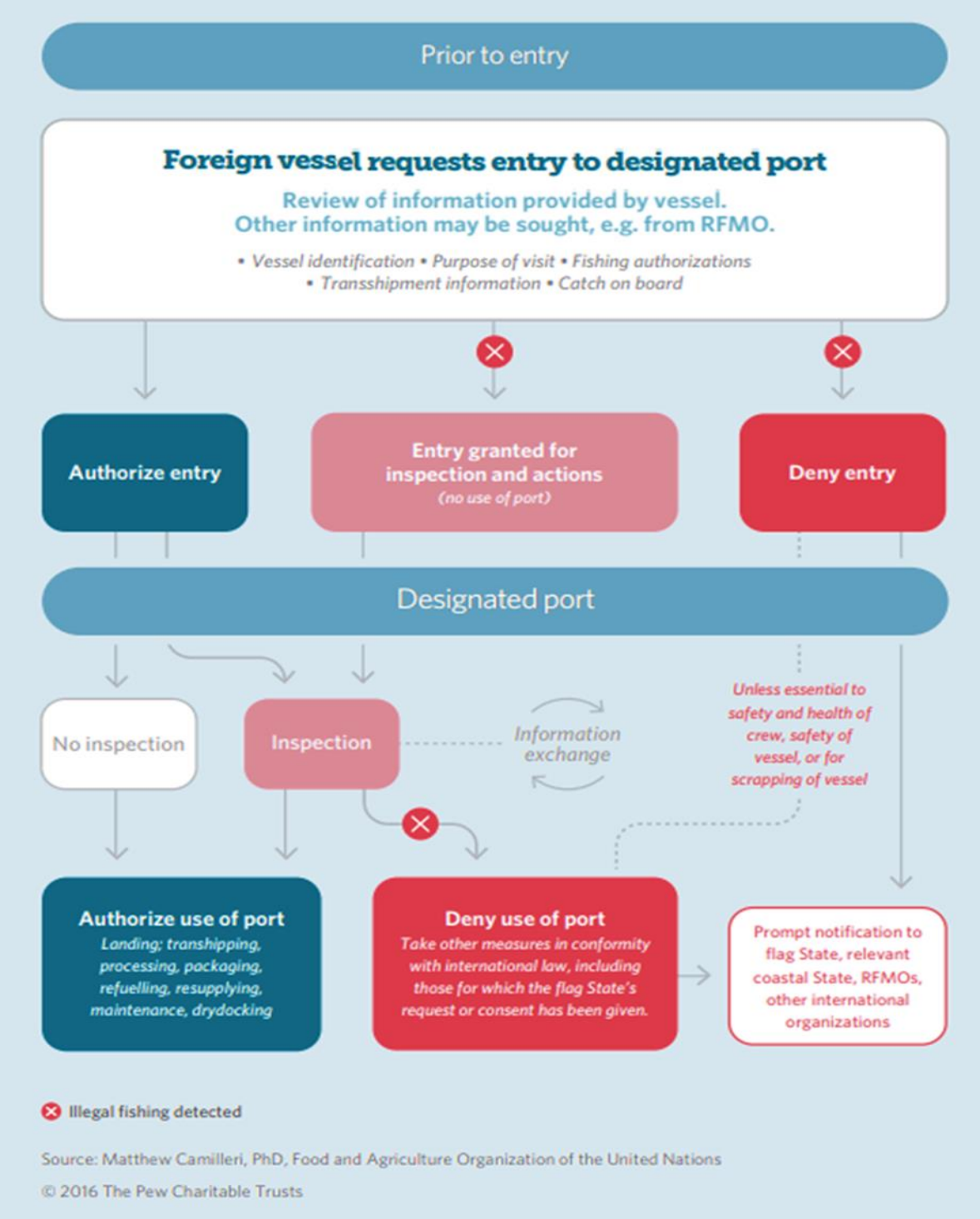
    3) If the flag state does not confirm that the fish onboard was caught legally within a reasonable time,

- When the crew's health or the safety of the vessel is in danger, a vessel cannot be denied access to port services.

In addition to the previously mentioned function of the port State in preventing IUU fishing, human resource capacity requirements are also critical for PSMA implementation such as sufficiently staffed, well-trained, and well-informed inspectorate and operationally integrated with other MCS components; systematic exchange of information and intelligence amongst national agencies involved in various elements of MCS, such as port inspections; and, regional

and worldwide information-sharing platforms are required for the PSMA to be effective (PEW, 2017).

**Figure 6.**
*How the PSMA works*

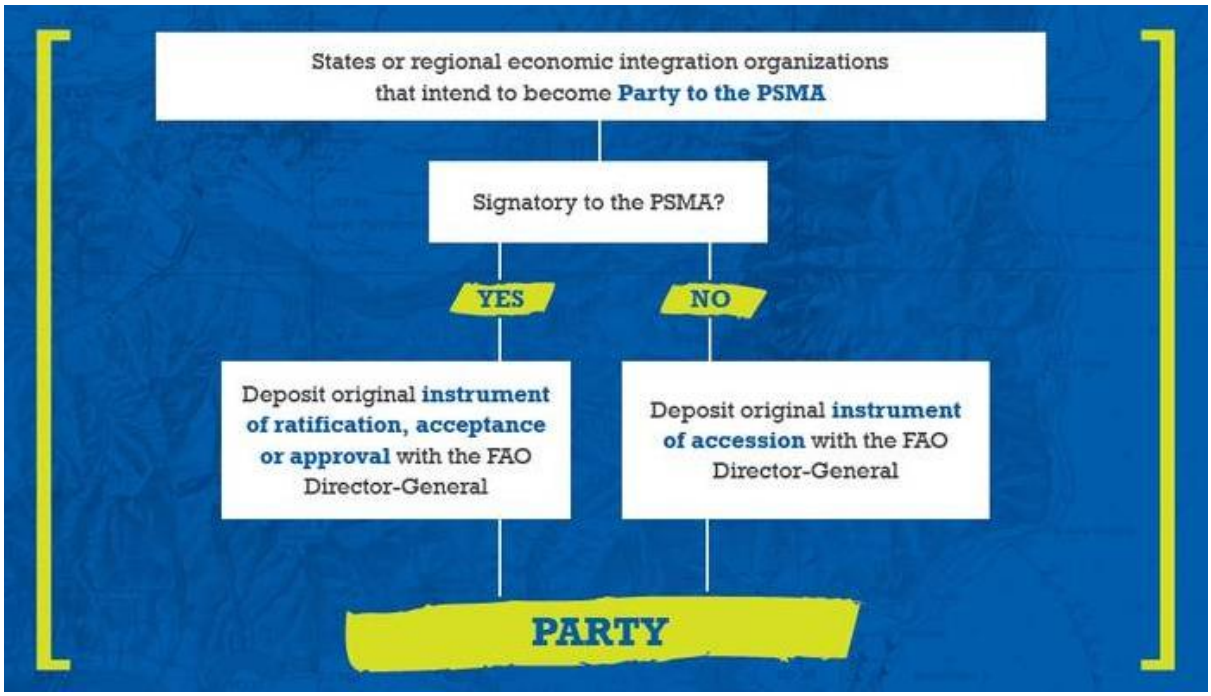



**Source:** *Trusts, P. C. (2017). Implementing the Port State Measures Agreement: A Methodology for Conducting a Capacity Needs Assessment.https://www.pewtrusts.org/-/media/assets/2017/04/capacity_needs_assessment.pdf*

### 3.3 State Practice on Implementing the PSMA

The UN-FAO approved and adopted the Port State Measure Agreement (PSMA) in 2009 and entered into force on June 5, 2016. According to the UN-FAO report, 72 parties to the agreement as of August 2022, including the European Union, on behalf of its 27 members. An original instrument of adherence must be deposited with the FAO Director-General to become a party to the PSMA. The instrument could be acceptance, ratification, or approval for PSMA signatories, whereas, for non-signatories, it is an instrument of accession. Figure 7 outlines the necessary actions to become a party to the PSMA.

**Figure 7.**
*The process to become a party to the PSMA*




**Source.** *United Nations- Food and Agriculture Organization (n.d). Process to become Party to the PSMA. https://www.fao.org/port-state-measures/background/becoming-a-party/en/*

This article discussed some of the countries that carried out PSMA implementation. It focuses on their preparedness and capacity building in particular. This section will explain the PSMA and share implementation success stories from chosen nations where the PSMA is being implemented. It also aims to uncover gaps or contradictions in the current evaluations, which may necessitate additional study or research.

Six years have passed since the PSMA was enacted. Various countries have begun to apply PSMA to tackle IUU fishing over the years. The following discussion will highlight the lessons

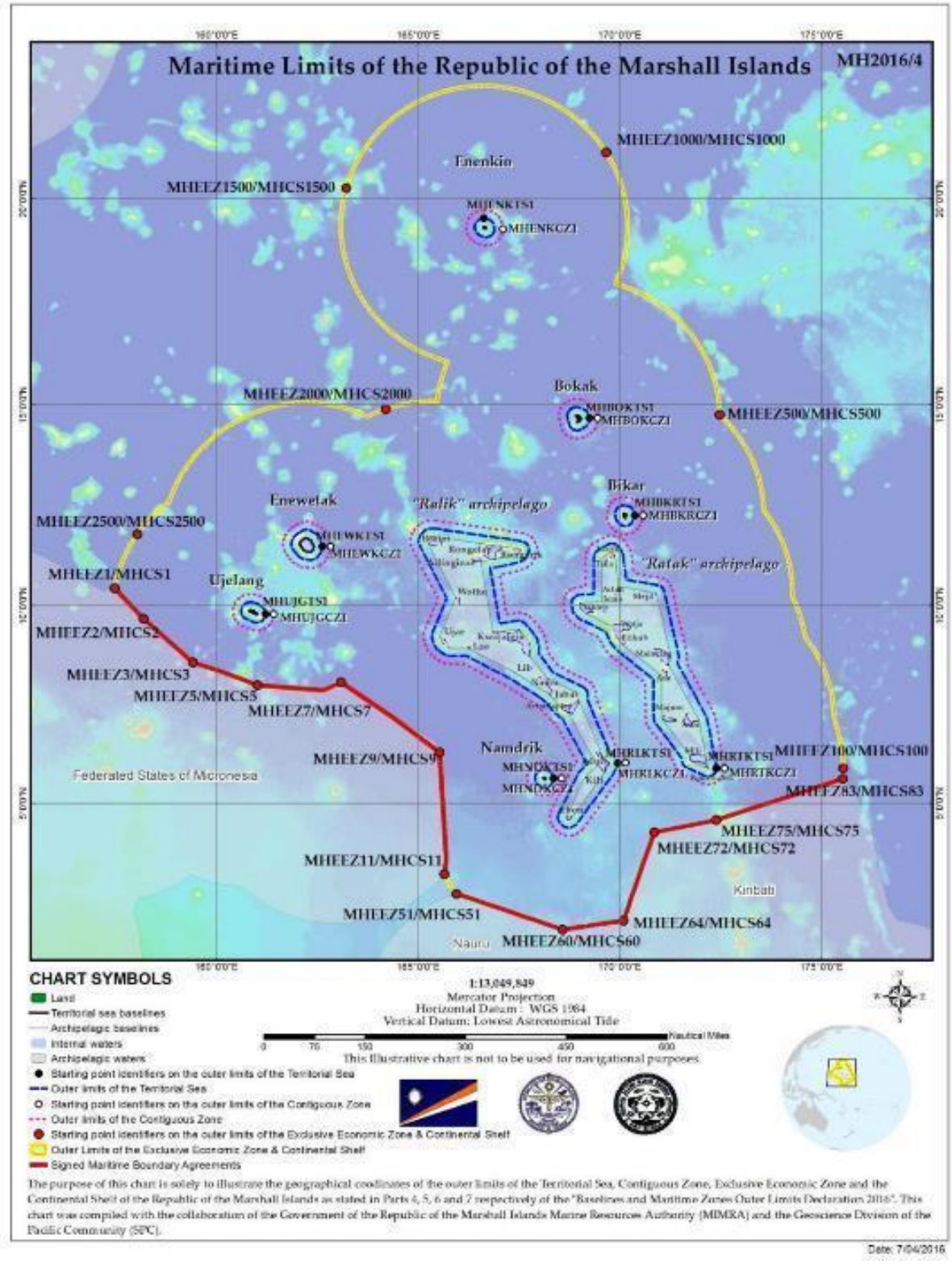
learned and best practices in PSMA implementation in the Marshall Islands and Thailand. Risk analysis was accepted as the optimum method by these two countries for relevant port states to implement the PSMA successfully. Decisions by port authorities to give, deny, or delay port access may be based on risk analysis (Gouache, (2021).

### 3.3.1 The Republic of Marshall Islands Port State Measures

The Republic of the Marshall Islands is a Pacific Ocean nation. It consists of some of Micronesia's most eastern islands. The Marshall Islands consist of more than 1,200 islands (Kiste, 2022), with a total population of 55,300 as of 2022. As illustrated in Figure 8, the Port of Majuro is one of the busiest transshipment ports in the Pacific (Gouache, 2021). It was also mentioned that the Port of Majuro ranked second in foreign vessel visits, first in the foreign fishing vessel hold size, and seventh in foreign carrier vessel hold size in 2017. As a result, Majuro is a critical seaport in the fight against IUU fishing.

**Figure 8.**

*The geographical feature of the Marshall Islands*




**Source:** *Maritime Zones Declaration Act (2016). Baselines and Outer Zone Limits. https://www.un.org/Depts/los/LEGISLATIONANDTREATIES/PDFFILES/DEPOSIT/mhl_mzn120_2016_2.pdf*

The Marshall Islands have already stated their intention to accede to the PSMA but have instigated PSMs gradually as a PSMA non-Party through their IUU-Free Pacific project to eradicate IUU fishing from the Pacific by 2023 (Gouache, 2021). The National Plan of Action to Prevent, Deter, and Eliminate Illegal, Unreported, and Unregulated Fishing (NPOA-IUU) in the country was deposited in the FAO repository by the director of the Marshall Islands Marine Resources Authority (MIMRA). The plan aligns the Marshall Islands government's policies with the International Plan of Action on Illegal, Unreported, and Unregulated Fishing (IPOA-IUU). It encourages openness, collaboration, integration, and sharing of resources (Blaha, 2021).

The successful implementation and strengthening of PSMA in the Marshall Islands were contributed to by several collaborations and joint initiatives providing technical support from the Pacific Island Fisheries Forum Agency (FFA) and the New Zealand Ministry of Foreign Affairs and Trade (NZMFAT) (Gouache, 2021). The Fisheries Information Management System (FIMS) is one of the most successful tools for implementing conservation measures in the Marshall Islands. It is used for electronic reporting of fisheries-related activities. It also gives consumers full information on all Registered Vessels. Authorities at the port can look up uploaded catch statistics and verify vessel positions.

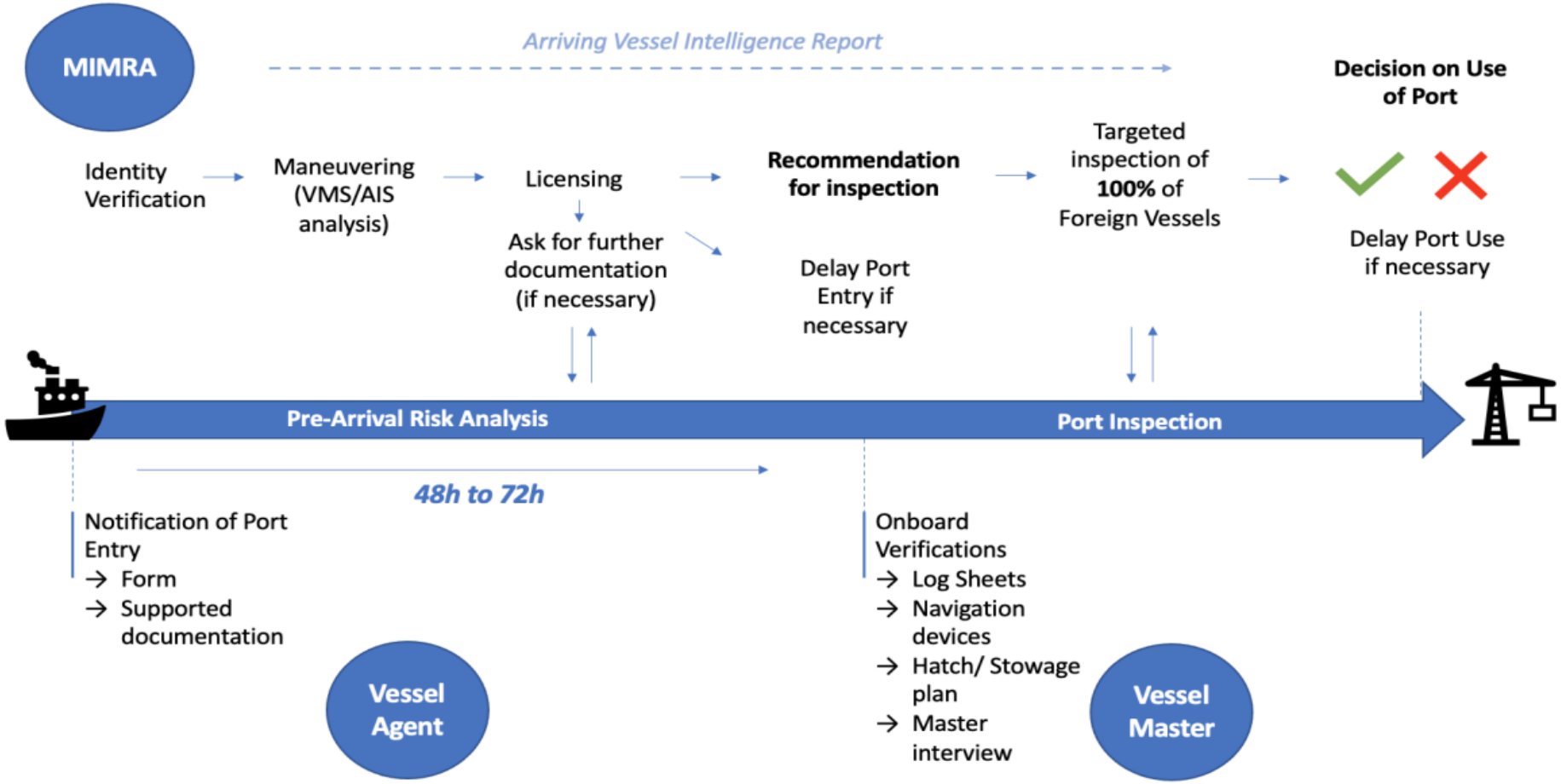
Similarly, MIMRA has extensive collaboration and information exchange across its national authorities, including the customs and marine department, and tuna importers and exporters. Furthermore, for the level of information described in the table below, the Marshall Islands Marine Resources Authority (MIMRA) collaborated with the following interlocutors at the regional and international levels (Gouache, 2021).

***Table 1.***
*Regional and International Levels of Cooperation in Marshall Islands*

| Interlocutors | Information exchanged |
|---|---|
| **Flag/ Coastal/ Port states** | ▪ Vessel and catch verification.<br>▪ Relevant Memorandum of Understanding. |
| **WCPFC** | ▪ Vessel verification.<br>▪ Annual report to WCPFC. |
| **FFA** | ▪ Vessel verification.<br>▪ FFA Tools. |
| **PNA** | ▪ PNA Tools |
| **Interpol** | ▪ Cooperation on cases among related countries. |

**Source:** *Gouache, C. (2021). Proposed Guidelines on Pre-Arrival Risk Assessments of Foreign Vessels: Using Lessons Learned to Strengthen Implementation of the UN FAO Agreement on Port State Measures. https://escholarship.org/content/qt8091w57h/qt8091w57h.pdf*

**Figure 9.**
*Diagram of the PSM Process in Marshall Islands*

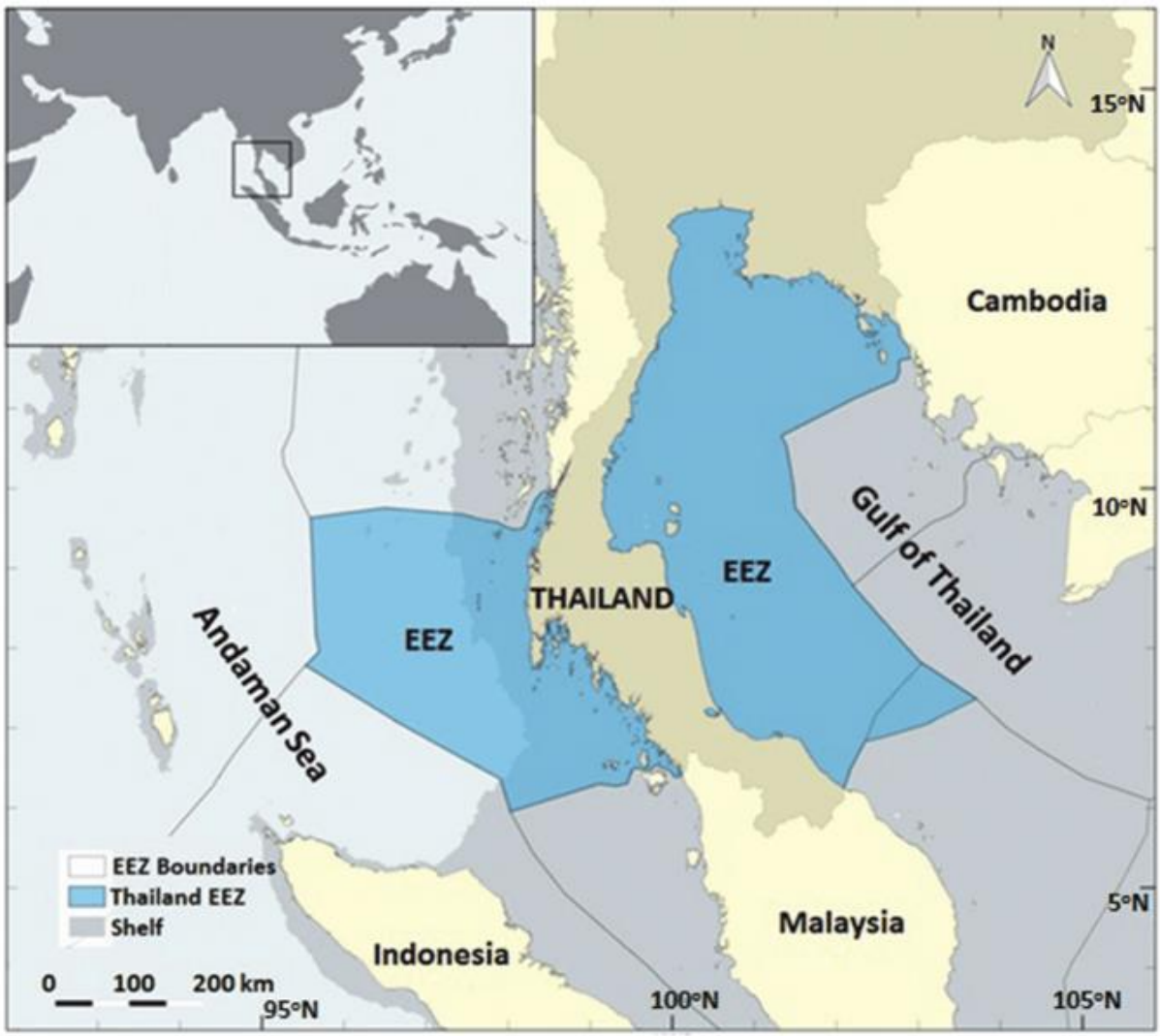



**Source:** *Gouache, C. (2021). Proposed Guidelines on Pre-Arrival Risk Assessments of Foreign Vessels: Using Lessons Learned to Strengthen Implementation of the UN FAO Agreement on Port State Measures. https://escholarship.org/content/qt8091w57h/qt8091w57h.pdf*

### 3.3.2 Thailand Port State Measures

Thailand is a littoral country with a total coastline of 3,148 kilometers encompassing the Andaman Sea coast and the Gulf of Thailand; it is located in the heart of mainland Southeast Asia, as shown in *Figure 5* (Lange et al., 2019); and it has a population of 67,083,000 as of 2022 (Britannica, 2022). Thailand is a prominent player in the global fish industry and it is one of the world's largest tuna processors, processing around 20% of the world's tuna (Gouache, 2021). Thailand has been a big exporter of fish, shrimp, and fish products since the 1970s, and it has long been a major protein source (Keyes, 2022).

**Figure 10.**
*The EEZ of Thailand*




**Source:** *Derrick, B., Noranarttragoon, P., Zeller, D., L. Teh, L. C., & Pauly, D. (2001). Frontiers | Thailand's Missing Marine Fisheries Catch (1950–2014). Frontiers. https://doi.org/https://doi.org/10.3389/fmars.2017.00402*

Thailand has become the 26th country to have ratified the Port State Measures Agreement. Thailand's acceptance of PSMA was motivated, in part, by a situation that occurred in 2015. According to Gouache (2021), in April 2015, the European Commission issued a pre-identification or “yellow card” to Thailand following a consultation process. It serves as a warning to take serious action against the issue of IUU fishing. However, the European Commission lifted Thailand’s pre-identification status in January 2019 to acknowledge the country's success in suppressing illegal, unreported, and unregulated fishing.

Thailand's current national policy, the Royal Ordinance on Fisheries, was updated to include the PSMA. Its goal was to combat IUU fishing and forced labor in the fishing industry in accordance with international law. It is a binding law that applies to foreign-flagged fishing vessels attempting to enter Thai ports. Sections 94 and 95 of Thailand's Royal Ordinance on Fisheries provide crucial measures for the pre-arrival risk analysis of foreign fishing vessels. Section 94 prevents foreign vessels engaging in IUU fishing from entering Thai ports, whereas Section 95 requires foreign vessels entering Thailand to notify the appropriate authorities prior to arrival.

The PSM process in Thailand works well because of the electronic system between agents and the Department of Fisheries (DOF), the clear rules for reporting, and the need to send complete documentation with the request for port entry through the e-PSM system. It facilitates efficient communication and the transfer of pertinent data throughout the entire process. Moreover, the Thailand Royal Ordinance on Fisheries (ROF) was amended by establishing the Fisheries and Fleets Management Division (FFMD) and Fish Quarantine and Fishing Vessel Inspection Division (FFID) which are dedicated to the risk analysis and inspection teams in light of the implementation of PSMA. The process of PSM in Thailand is illustrated in Figure 11.

Similarly, collaboration is exchanged at the national level with various authorities such as customs, maritime departments, Thailand's port authority, and tuna importers and exporters. Consequently, for the level of information described in the table below, the Thailand Department of Fisheries coordinated with the following regional and international interlocutors (Gouache, 2021).

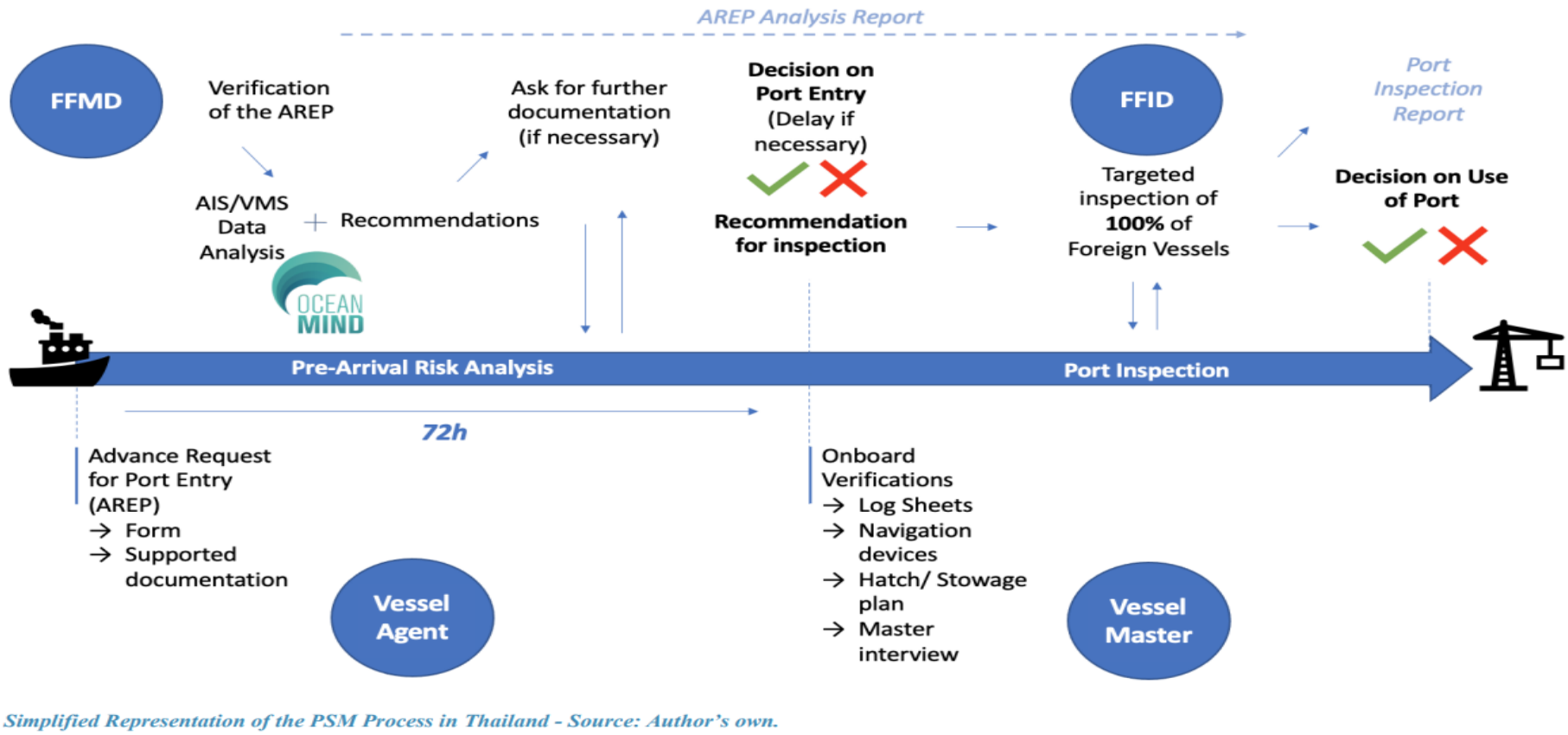
***Table 2.***
*Regional and International Levels of Cooperation in Thailand*

| Interlocutors | Information exchanged |
|---|---|
| **Flag/ Coastal/ Port states** | ▪ Vessel and catch verification.<br>▪ Report PIR and actual weight.<br>▪ Relevant Memorandum of Understanding. |
| **IOTC** | ▪ Vessel verification.<br>▪ IOTC e-PSM System.<br>▪ Annual report to IOTC. |
| **FFA (Pacific Island Forum Fisheries Agency)** | ▪ Vessel verification. |
| **Interpol** | ▪ Cooperation on cases among related countries.<br>▪ Reality training for evidence collecting. |

**Source:** *Gouache, C. (2021). Proposed Guidelines on Pre-Arrival Risk Assessments of Foreign Vessels: Using Lessons Learned to Strengthen Implementation of the UN FAO Agreement on Port State Measures. https://escholarship.org/content/qt8091w57h/qt8091w57h.pdf*

The PSMA implementation in Thailand and the Marshall Islands is a great model for the Philippines to emulate. These two countries inked a memorandum of understanding to increase cooperation in combatting IUU fishing by sharing information. A two-way approach in which each country obtains something that improves the accessibility and transparency of its systems would be ideal. It could serve as an example of how international collaboration and information sharing could work. However, more research is needed to ensure successful and effective adoption in the Philippines.

**Figure 11.**
*Diagram of the PSM Process in Thailand*




*Simplified Representation of the PSM Process in Thailand - Source: Author's own.*

**Source:** *Gouache, C. (2021). Proposed Guidelines on Pre-Arrival Risk Assessments of Foreign Vessels: Using Lessons Learned to Strengthen Implementation of the UN FAO Agreement on Port State Measures. https://escholarship.org/content/qt8091w57h/qt8091w57h.pdf*

## SECTION 4. METHODOLOGY AND RESULT

### 4.1 Methodology

#### 4.1.1 Purpose and Outline

This study aims to assess the Philippine government's preparation for implementing the Port State Measure Agreement (PSMA) to prevent, deter, and eliminate illegal, unreported, and unregulated (IUU) fishing.

#### 4.1.2 Methodological Approach

For the objective of answering the study questions as a whole, the researcher conducted semi-structured online interviews with relevant respondents, outlined below, with the objective to analyze the Philippine government's readiness to implement the PSMA and provide recommendations on how to improve implementation.

#### 4.1.3 Stakeholders and Selection of Participants

Listed below are various government entities that have some role in implementing the Port State Measure Agreement in the Philippines. This study focuses on the three agencies with specific mandates in fishing regulation: BFAR, PCG, and PFDA.

1. Bureau of Fisheries and Aquatic Resources (BFAR)
2. Philippine Fisheries and Development Authority (PFDA)
3. Philippine Coast Guard (PCG)
4. Bureau of Plant and Industry (BPI)
5. Bureau of Animal Industry (BAI)
6. Bureau of Customs (BOC)
7. Bureau of Immigration (BOI)
8. Bureau of Quarantine (BOQ)

The researcher interviewed members of the Philippine Coast Guard assigned to the Maritime Safety units in Manila, Davao, and General Santos. The senior administrative Officer and the PSMA focal person represented the PFDA, while the Fisheries Regulatory Management and Enforcement Officers, legal advisor, and the PSMA focal person represented the BFAR. The seventeen (17) respondents were chosen based on their competence in their respective roles and their vital involvement in the development and execution of PSMA. By examining and evaluating these government institutions, the researcher confirmed the existence of gaps and obstacles in preparation for PSMA's implementation.

The participants were interviewed according to a protocol authorized by the Research Ethics Committee of the World Maritime University. The interviews were held in English and Filipino (Tagalog dialect), ran 45 minutes to one hour, and lasted a month, from July 18 to August 18, 2022.

#### 4.1.4 Instrumentation

Using a semi-structured interview, the researcher gathered qualitative responses/data. The questions were constructed in an open-ended format to allow the researcher to collect additional ideas and information from responders. Semi-structured interviews are favored because they allow for a greater breadth of data and insights regarding complex behavior as opposed to the pre-supposed limitations inherent in structured approaches. The semi-structured interview distinguishes itself from other interview methods because it provides a high level of topical significance while sustaining participant interest. It also promotes two-way contact between interviewers and participants, allowing people to speak freely about sensitive issues (McIntosh & Morse, 2015). Since the Philippines' implementation of PSMA is still in its early stages, semi-structured interviews are thought to be the best qualitative method for this study.

#### 4.1.5 Data Collection

Online interviews with representatives of the organizations responsible for putting the PSMA into effect in the Philippines, situated in Manila, Davao, and General Santos, were used to gather primary data. Additionally, UNCLOS and national legislation were consulted and analyzed as primary documents.

#### 4.1.6 Data Analyses

- *Qualitative Analysis*

Open coding was utilized in this study to examine qualitative data. The information gathered from the interviews was coded and categorized according to themes. Delve was first used by the researcher on a desktop to code, assign themes, and highlight important annotations. The statements were brief and uncomplicated because the transcripts were translated from Filipino to English. As a result, the researcher used MS Word to compile data on the occurrence of related or comparable concepts and organize them into themes. Based on the study questions, themes emerged from the analysis. The researcher's interpretation and relevant interview comments are used to present and explore these topics in Section 5.

### 4.2 Results

This section contains the data collected and responses from the online interview, which served as the primary research instrument.

This research study aims to examine the existing national government policies for preventing, deterring, and eliminating illegal, unreported, and unregulated fishing (IUUF) in the Philippines, highlighting its substantial challenges, limitations, and gaps. Second, assess the capability and readiness of government agencies responsible for the implementation of the Port State Measure Agreement (PSMA), specifically the Bureau of Fisheries and Aquatic Resources (BFAR), the Philippine Fisheries Development Authority (PFDA), and the Philippine Coast Guard (PCG).

Finally, make sensible suggestions for the future implementation of PSMA in the Philippines based on the study's findings.

To help achieve the aforementioned objectives, the research questions are being raised: how prepared is the Philippine government for the implementation of PSMA; what role do BFAR, PFDA, and PCG in the current policies; what difficulties have been encountered; and what other initiatives might help improve in the preparation of PSMA implementation in the Philippines.

The researcher requested the BFAR, PFDA, and PCG designated heads to seek the availability of suitable respondents from their end to discuss the preparedness of the Philippines in implementing PSMA.

The researcher interviewed seventeen management and operational-level employees. Semi-structured interviews were conducted through the online meeting application Zoom. Before conducting the interview, the researcher emailed the information sheet and consent form to respondents from various agencies implementing PSMA. During the interview, the researcher asked the interviewee for permission to record the activity. The researcher then transcribed and translated the statements from Filipino to English. The researcher then put the data into themes based on the information needed to answer the study's goals. The interview is conducted with the following respondents identified by their respective agencies based on their tasks (Table 3).

***Table 3.***
*List of Respondents*

| RESPONDENT IDENTITY | INSTITUTION | DESIGNATION |
|---|---|---|
| Respondent 01 (R1) | Philippine Fisheries and Development Authority (PFDA) | Administrative Officer/ PSMA Focal Person |
| Respondent 02 (R2) | Bureau of Fisheries and Aquatic Resources (BFAR) | Fisheries Protection and Law Enforcement Officer |
| Respondent 03 (R3) | | Legal Officer/ PSMA Focal Person |
| Respondent 04 (R4) | | Capture Fisheries and Licensing Officer |
| Respondent 05 (R5) | | Davao Fisheries Regulatory Management and Enforcement Officer |
| Respondent 06 (R6) | | General Santos Fisheries Regulatory Management and Enforcement Officer |
| Respondent 07 (R7) | Philippine Coast Guard (PCG) | Manila Port State Control Officer |
| Respondent 08 (R8) | | Davao Port State Control Officer |
| Respondent 09 (R9) | | Davao Port State Control Officer |
| Respondent 10 (R10) | | General Santos Port State Control Officer |
| Respondent 11 (R11) | | General Santos Boarding Team Member |
| Respondent 12 (R12) | | Davao Boarding Team Member |
| Respondent 13 (R13) | | Davao Boarding Team Member |
| Respondent 14 (R14) | | Maritime Safety Officer |
| Respondent 15 (R15) | | Maritime Safety Officer |
| Respondent 16 (R16) | | Maritime Security Officer |
| Respondent 17 (R17) | | Maritime Security Officer |

After all interviews were transcribed, recurring themes emerged, to wit:

- Awareness of the existence of IUU Fishing
- Agency roles, Regulations and legal obligations

- Education and Training (Capacity Building Program)
- Readiness Evaluation
- Benefits of implementing PSMA

#### 4.2.1 Awareness of the existence of IUU Fishing

Fishing is a significant part of the Philippine economy due to its archipelagic geography, and IUU fishing is widely recognized as a serious issue nationwide. According to the interview, all 17 respondents are aware that IUU fishing occurs in the Philippines.

Specifically, R2 acknowledged the efforts made by the Philippine government to suppress illegal fishing and its existence in the country. However, the harm caused by illegal, unreported, and unregulated (IUU) fishing is frightening not only for the environment but also for the socioeconomic aspect of the community (R6). Additionally, R3 stated that, *"Identifying the exact data of IUU fishing is difficult to crack because even the entire world finds it challenging." However, because the activity is clandestine, it isn't easy to assess, and you must investigate the entire supply chain."*

Thus, the exact scope of IUU fishing in the Philippines is unknown, but most of the time, it can be estimated based on submitted records of fishing vessel apprehensions. For instance, based on the researcher's own personal experience, Philippine commercial fishing vessels have been caught fishing in regions designated as protected zones and during closed fishing seasons (e.g. Sardine Closed Season in the Zamboanga Peninsula). The majority of the rich fishing grounds are located in places like Palawan, Batanes, Cebu City San Fernando, and Zamboanga Peninsula.

There are also international illegal angling activities reported inside the Philippine EEZ. The majority of these foreign fishing vessels/ boats are from Taiwan, Malaysia, Indonesia, Vietnam, China, and Japan. This IUU fishing impacts the fish stocks, and contributes to the destruction of the marine ecosystem. As R5 stated, *"I cannot provide specific data on IUU fishing in the Philippines, but I have personally witnessed*

*the devastation caused by poachers, such as the destruction of coral reefs and the capturing of huge clams, particularly in the West Philippine Sea or the South China Sea. I had the opportunity to board a Philippine Coast Guard vessel and undertake patrol in the aforementioned area".*

### 4.2.2 Agency Roles, Regulations, and Legal Obligations

Subsequently, some respondents recognized and acknowledged the government's efforts to combat IUU fishing in the Philippines. The current policy is outlined in the Philippine Fishery Law of 1998, as revised by Republic Act Number 10654. It directs the BFAR to carry out the law to protect all fisheries and aquatic resources, as well as to prevent, detect, and eliminate IUU fishing (R4). Since the PSMA is a fishery matter, the BFAR is the designated government lead agency and the responsible in the implementation of this agreement, with the collaboration of other government agencies. In addition to this, R2 mentioned about the creation of One Stop Action Center (OSAC) to effectively implement the provisions of PSMA. It is a multi-agency government center where the main jobs are boarding and inspection, processing documents for fishery products that will be landed in the Philippines and shipped to foreign markets, and other necessary documents for foreign fishing vessels coming into and leaving the country. This center mainly focuses in implementing PSMA.

Moreover, as stated by R14, *the PCG's role is to assist in the enforcement of fisheries and other laws on the marine jurisdiction of the Philippines based on RA 9993",* and R7 also mentioned that, *"The PCG maintains its role in combating IUU fishing by conducting continuous Monitoring, Control, and Surveillance (MSC) operations onboard PCG and BFAR vessels.".* Concerning this statement, the PCG and BFAR signed a Memorandum of Agreement (MOA) to improve the efficiency and effectiveness of the enforcement of fisheries and maritime laws, particularly those about the management, conservation, development, and protection of the nation's marine environment, fisheries, and aquatic resources. The manning of BFAR vessels, wherein PCG personnel is supplemented for this purpose, was also covered by the agreement.

Similarly, fishing ports are essential to the requirements mentioned in the PSMA implementation provision. The PFDA will play a big part in providing standard fishing ports for this purpose. As mentioned by R1, *"the wharves that are intended for foreign fishing vessels are International Ship and Port Security (ISPS) accredited ports"*. The PFDA is the port authority in charge of the Davao and General Santos Fish Port Complexes and the Philippines' other six (6) major ports. These two ports were initially considered potential destinations for foreign fishing vessels. According to R3, Davao and General Santos City are crucial locations since the fishing grounds are in the southern Philippines, Papua New Guinea, and the Central and Western Pacific Areas. It is also mentioned that the PFDA will be in charge of providing the office for the OSAC that will be established for the designated agencies participating in the PSMA implementation, however, funding for this purpose is yet to be provided.

On the other hand, the BFAR being the lead agency initiated a MOA, to establish a shared understanding and effective coordination with all government agencies engaged in executing PSMA. R4 has been waiting for the acceptance of this MOA to have easy collaborative activities with other agencies, but it is yet to be signed off. He said, *"The challenge right now is for the Memorandum of Agreement (MOA) to be signed and approved by the various government agencies engaged in the execution of PSMA, and the preparations will be placed on hold for the time being, but we will be resolved sooner or later."*

#### 4.2.3 Education and Training (Capacity Building Program)

The Port State Measure Agreement is a new policy implemented in the Philippines. It acceded in 2018 with the BFAR as the lead implementation agency. Based on the statement from FAO- Philippines, they have been providing technical support to implement related instruments and tools with other international partners such as EU Commission, Singapore ABA, Australian Fisheries Management Authority, National Oceanic and Atmospheric Administration (NOAA) in Bangkok under International Law Enforcement Academy (ILEA), and United States Department of State- Bureau of International Narcotics and Law Enforcement Affairs (US-INL). The capacity building provided pertains to Fisheries Enforcement & Prosecution and Boarding Inspections

as cited by R1 and R4 which are necessary and important part of human resources capacity.

However, the above trainings are more on legal aspects or formulating rules and regulations. These trainings are significant but it is also necessary to conduct more specifically on actual boarding procedures. Additionally, eight (8) of the seventeen individuals interviewed stated that they have not yet received any PSMA-related training or capacity-building efforts. Some of the reasons stated by respondents include the unanticipated Corona Virus Desease (COVID) 19 outbreak, a change in administration, and the fact that the PSMA is still in its early stages, making it a less immediate priority for the government. As R6 and R15 mentioned, *" PSMA is less a government's priority for now, especially, given that all department heads are going through transitions as a result of the new administration. There are more issues that require immediate attention, such as internal problems",* and *"Most PSMA planning is being delayed due to the COVID-19 outbreak".*

### 4.2.4 Readiness Evaluation

The readiness evaluation in implementing the PSMA was one of the themes highlighted as a result of the researcher's interview. R5 and R6 mentioned the importance of creating a Manual of Operations to provide guidance for each agency in performing their functions correctly, as well as the development of a Standard Operating Procedure (SOP) that specifies the detailed procedures that must be followed to implement and assist personnel in carrying out routine operations in implementing the PSMA. It was also suggested that each agency concerned should form a committee to focus on the subject of implementing PSMA so that nothing is overlooked prior to implementation; similarly, if anything needs to change or develop during implementation, this committee will make the required adjustments.

### 4.2.5 Benefits of Implementing PSMA

The PSMA has not yet been implemented in the Philippines, but some respondents stated their strong support for the legislation and provided specifics on the benefits

they anticipate if it is effectively implemented. "The successful execution of the PSMA may secure the livelihoods of our legal fishermen," said R10, and "the implementation of the PSMA will stimulate effective cooperation with other RFMOs," said R5.

However, the majority of respondents are unsure of their position because, as a result, gaps and difficulties cannot be found until PSMA is put into practice. In addition, seven respondents out of the 17 said they learnt about the PSMA for the first time while taking the online survey. The two (2) respondents claim that PSMA is new to them because they are new to their respective workplaces and that no PSMA briefing has been provided.

## SECTION 5. DISCUSSION

### 5.1 Discussion

The primary purpose in doing this research was to ascertain whether or not the government of the Philippines is prepared to implement the Port State Measure Agreement (PSMA) to curb IUU fishing. Accordingly, this study focuses on the three government agencies responsible for executing the provisions of PSMA, namely the BFAR, the PDFA, and the PCG accession to the agreement by the Philippines in 2018. Key themes were identified in the preceding section to address the research questions, and these themes provided the framework for analysis in the sections that follow.

#### 5.1.1 Awareness of the existence of IUU Fishing

In the Philippines, the threat posed by illicit, unreported, and unregulated (IUU) fishing is clear. The destruction appears to be substantial and is a source of concern. This is a concern not only for the fishing industry, but also for the economy and the environment.

Everyone who took part in the interview acknowledged that illegal fishing activities existed in the country and caused harm. As mentioned by a number of respondents, there are identifiable severe impacts on the environment, and that if these activities are not addressed, the environment will not recover and the marine ecosystem as a whole would be degraded. With this clear understanding, the concerned organizations can strengthen the existing policies to curb, if not completely stop, these illegal activities. Additionally, the survey indicated that awareness was crucial and directly related to education and communicating the value of a conservation approach (Mirrasooli et al., 2019). This suggests that it is possible to reduce IUU fishing by improving public awareness.

#### 5.1.2 Agency roles, Regulations, and legal obligations

The BFAR, the lead agency, initiated a Memorandum of Agreement (MOA) to facilitate sharing of information amongst the various government entities involved in the PSMA implementation. As of the time that the interviews were conducted, however, it was stated that the MOA had not yet been executed and is pending approval from the

agencies involve. The approval of this MOA can be regarded as one of the key initial steps required to build internal cooperation to prevent duplication of effort, avoid conflicts and mitigate risk between parties (Morgan et al., 2020).

A further development designed to enhance inter-agency cooperation, as mentioned by R2, is that the government plans to create a One-Stop-Action Center (OSAC) comprises by the different agencies involved in implementing PSMA, headed by the BFAR. This issue was supported under Section 8, Chapter II of the Philippine National Fisheries Administrative Order (FAO) 267. However, the fund to be used in the rehabilitation is still for approval and thus, the OSAC is still in the planning stage.

#### 5.1.3. Education and Training (Capacity Building Program)

Capacity building entails enhancing human resource capabilities, improving technology, providing financial resources, and administrative and management capacity (Eade, 1997). The Fisheries Enforcement & Prosecution and Boarding Inspections are some of the trainings provided by international entities to the personnel involved in implementing PSMA which the FAO-Philippines concur.

#### 5.1.4. Readiness Evaluation

PSMA adoption in the Philippines is still in its early stages. Thus, inquiring or interviewing the involved individual or organization is one of the processes to assess their preparedness based on regulatory documents, laws, and capacity building (training), as well as the strong rapport between the implementing agencies. On the contrary, a lack of evaluation or insufficient coordination, is likely to result in confusion and poor implementation (Febriani et al., 2020).

Using the data provided by responders to gauge the level of preparation of different Philippine government agencies, these agencies can be evaluated as being partially prepared. First, there are already laws in place, like the Fisheries Administrative Order No. 267, which was made based on Republic Act No. 10654, which changed Republic Act No. 8550, and the Philippine Fishery Code of 1998 (Philippines, 2014). However, some national legal documents such as Manual of Operations indicating the functions of each government agencies, and the Standard Operating Procedure (SOP) that will

also indicate the day-to-day activities will need to be formulated in coordination with the concerned agencies. R6 mentioned that, “due *to COVID Pandemic, most of the preparation slow down. The SOPs are still in the process”.*

Second, facility; the government has already designated dedicated fishing ports intended for foreign fishing vessels – the Davao Fish Port Complex and the General Santos Fish Port Complex. This is an important step, meeting one of the requirements in implementing PSMA.

Lastly, capacity building that is essential to the personnel enforcing the laws depending on the outcome of interviews, half of the respondents have yet to receive important training while the others who attended such training will need refresher courses such as actual boarding procedures. It also appears that the level of capacity varies between agencies. Based on the statement of R6, *“On BFAR side, we are ready. Our inspectors are trained but we are still in the process of collaborating with other agencies.”*

Based on the PEW Report on Capacity Needs Assessment, (2017), requirements in implementing PSMA have specific trainings intended for senior fisheries and port - management staff and legal drafters, fisheries inspectors, MCS personnel and lawyers/ judges (human resources capacity) and institutional capacity requirements specifically to establish adequately implement port state measures, trained inspectors, information exchange & monitoring system & appropriate management measures that are tailored with the international and domestic laws.

The requirements for the effective and successful implementation of PSMA must be properly identified. For example, the specific functions of all concerned government entities to prevent duplication of tasks. Similarly, the documentation required to prove legal compliance.

In summary, the Philippines is yet to invest time in many aspects prior to implementing the PSMA as mentioned above.

#### 5.1.5. Benefits of implementing PSMA

During the interviews, some respondents identified benefits of implementing PSMA including: it is a disincentive to IUU fishing; as a party to the agreement and a flag state, we will bear responsibility for our fishing vessels that will land their catches in other nations who are also parties to the aforementioned agreement; It will encourage effective cooperation and collaboration with other RFMOs in denying illegal fishing vessel actions, it will protect the livelihoods of legal fishermen, and, finally, it is important to recognize that it is a tool to combat IUU fishing that will contribute to the development of national fishery laws, which was supported by the UN-FAO, (2019).

Nonetheless, strengthening the efforts of concerned agencies are required to achieve these ideals, as IUU fishing activities will continue unless good governance is established. On the contrary, seven respondents honestly acknowledged that they had no awareness of the PSMA, and two of them mentioned that they had only recently been appointed to their current positions and that there had not yet been a PSMA briefing.

### 5.2 Limitations

The researcher originally planned to have a respondents at the operational and administrative levels from all Philippine departments participating in PSMA implementation; however, this study focuses solely on three agencies with common mandates on fishery functions. Similarly, the number of responses is limited to three government entities due to time constraints and geographical issues. The researcher was limited to those who had previously agreed to act as interviewees and confirmed their availability.

There may have been different conclusions drawn from this study if a different set of stakeholders had been involved in the data collection process. Data from various government agencies engaged in the implementation, as well as numerous stakeholders, such as shipping companies and commercial fisheries, may give crucial and varied information.

Lastly, future researchers can integrate additional components of an instructional strategy, such as an evaluation, to enhance its effectiveness. Participatory approach (Guijt, 2014) and observation of the PSM operations could have added value information to the study. Furthermore, it is also recommended to use more sophisticated methods in addition to a qualitative approach of data collection.

Furthermore, an additional study should be performed to analyze progress following the adoption of PSMA, and other government entities other than the three mentioned should be included.

## SECTION 6. CONCLUSION AND RECOMMENDATION

### 6.1 Conclusion

IUU fishing has become generally accepted by the international community, RFMOs, organizations for regional economic integration, and individual governments. This study's introduction described the global scope of illegal, unreported, and unregulated (IUU) fishing. It also stressed how important it is for each country to have a good plan for dealing with the problem. Therefore, the following discussions were centered on the national situation including the readiness evaluation in the preparation of government agencies in the Philippines in the implementation of PSMA and identifying its limitations, pressing issues, gaps, and challenges.

In the Philippines, the PSMA is still in its infancy since its accession on May 18, 2018, a new government concern. Although the government acted immediately after its accession, unknown conditions, like the COVID-19 outbreak and change of administration, delayed the government's readiness. Therefore, appropriate regulation, supervision, and evaluation are essential for its long-term viability. In the same way, the research showed that various programs and initiatives must be improved to prepare for the PSMA, and strong collaboration with NGAs and RFMOs is essential.

Compliance with all PSMA implementation standards is a challenge for the Philippines, requiring immediate action. For the Philippines to successfully implement the PSMA and contribute to global efforts to address the issue, there is an urgent need to foster good coordination and shared understanding among government institutions.

As the research has shown, there is a need to put more of an emphasis on developing each agency's capability and creating the necessary national law documents. Despite the efforts to prepare prior the implementation of PSMA, more research is needed to help learn to effectively implement the PSMA in the Philippines.

## 6.2 Recommendation

The study's findings and conclusions have led to the following suggestions. The Philippines' overall state of preparedness for PSMA implementation was technically/partially prepared. However, among the topics in the readiness evaluation, capacity building was determined to have a modest level of preparedness. As a result, the researcher suggests that the government increase its organizational capacity, which includes human resources capacities and institutional capacities requirements, in order to successfully implement the PSMA.

The human resources capacity consists of senior fisheries, port management, and legal drafting personnel who understand the provisions of international fishing agreements and can incorporate them into national laws and regulations. Similarly, fisheries inspectors acquainted with pertinent PSMA rules include personnel trained in boarding and inspection procedures. Additionally, training to keep up with the latest information technology trends is vital. On the other hand, institutional capacities emphasize the legal authority of a state to establish explicit instructions consistent with applicable domestic and international law; it includes the formulation of the Manual of Operations which is based on the PSMA provisions that establish implementation guidelines and protocols, as well as the Standard Operating Procedures (SOP) that outline the specific guidelines, instructions, and routine tasks of each agency involved in the implementation of the PSMA in the Philippines. The creation of these legal documents would enhance cooperation, reduce confusion, and prevent duplication of roles and obligations among agencies implementing the PSMA.

Because the PSMA is a new concern in the Philippines, education and training for human resources with the necessary skills, knowledge, and competences in executing the PSMA should be offered as part of the preparation stage. Furthermore, constant turnover of personnel receiving training should be avoided; otherwise, proper turnover of duties and responsibilities must be considered. The PSMA requires leadership stability at this early stage of implementation, as well as the establishment of an environment for collaboration and cooperation among the government entities involved, knowledge management, and organizational learning.

Finally, to conduct an assessment after the full implementation of PSMA. Additionally, research may be required to investigate other interesting PSMA concepts that may widen the knowledge of comparable investigations.

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# Appendices

Appendix A

WORLD MARITIME UNIVERSITY

**Information Sheet**

Dear Participant,

I am a Master of Science in Maritime Affairs student at World Maritime University specializing in Ocean Sustainability, Governance, and Management (OSGM). I am writing a dissertation focusing on **"The Implementation of the Port State Measure Agreement (PSMA) to deter Illegal, Unreported, and Unregulated Fishing (IUUF) in the Philippines".**

This research aims to evaluate and assess the current issue of illegal, unreported, and unregulated fishing in the Philippines, as well as the readiness of concerned government agencies to implement the Port State Measure Agreement (PSMA), the world's first legally binding international treaty designed to prevent, deter, and eliminate IUUF issues.

In light of this, I would like to request your voluntary participation in an interview focused on the following key issues:

- The preparatory measures for PSMA implementation
- The government's efforts and challenges in suppressing IUUF
- How the PSMA impacts the Philippines' IUUF issues

Anonymized and confidential research data will be archived on a secured virtual drive linked with an email address at World Maritime University. As soon as the degree is awarded, all data will be deleted.

Your participation in the interview is highly appreciated.

Student's name: MARILYN LABASAN JAAL
Specialization: Ocean Sustainability, Governance, and Management (OSGM)
Email address: marilynlabs7@gmail.com/ w1010993@wmu.se

Appendix B

WORLD MARITIME UNIVERSITY

## Consent Form

Dear Participant,

Thank you for agreeing to participate in this research survey, which is being conducted in connection with the interviewer's dissertation, in partial fulfilment of the requirements for the award of the degree of Master of Science in Maritime Affairs at the World Maritime University in Malmo, Sweden.

The topic of the Dissertation is:

**The Implementation of the Port State Measure Agreement (PSMA) to deter Illegal, Unreported, and Unregulated Fishing (IUUF) in the Philippines**

The information provided by you in this interview will be used for research purposes and the results will form part of a dissertation, which will later be published online and made available to the public. Your personal information will not be published. You may withdraw from the research at any time, and your personal data will be immediately deleted.

Anonymized research data will be archived on a secure virtual drive linked to a World Maritime University email address. All the data will be deleted as soon as the degree is awarded.

Your participation in the interview is highly appreciated.


Student's name: MARILYN LABASAN JAAL
Specialization: Ocean Sustainability, Governance and Management (OSGM)
Email address: marilynlabs7@gmail.com/ w1010993@wmu.se


* * *

I consent to my personal data, as outlined above, is used for this study. I understand that all personal data relating to participants is held and processed in the strictest confidence, and will be deleted at the end of the researcher's enrolment.

Appendix C

WORLD MARITIME UNIVERSITY

## WMU Research Ethics Committee Protocol

| | |
|---|---|
| Name of principal researcher: | JAAL, MARILYN |
| Name(s) of any co-researcher(s): | N/A |
| If applicable, for which degree is each researcher registered? | MSc in Maritime Affairs under the specialization of Ocean Sustainability, Governance and Management (OSGM) |
| Name of supervisor, if any: | Professor Clive Schofield (Supervisor)<br>Professor Francis Neat (Co-supervisor) |
| Title of project: | The Implementation of the Port State Measure Agreement (PSMA) to deter Illegal, Unreported, and Unregulated Fishing (IUUF) in the Philippines |
| Is the research funded externally? | No |
| If so, by which agency? | N/A |
| Where will the research be carried out? | Malmo, Sweden (WMU) |
| How will the participants be recruited? | By sending an email to all participants, as well as other forms of online communication such as zoom and phone calls, where appropriate. |
| How many participants will take part? | 8-10 |
| Will they be paid? | No |
| If so, please supply details: | N/A |
| How will the research data be collected (by interview, by questionnaires, etc.)? | Mixed Methods- Semi-structured interview and document analysis |
| How will the research data be stored? | Password-protected data storage |
| How and when will the research data be disposed of? | The data will be deleted after the completion of my Master's Degree in October 2022. |
| Is a risk assessment necessary? If so, please attach | N/A |

Signature(s) of Researcher(s): Date: 13 July 2022

Signature of Supervisor(s): Date: 13 July 2022

Please attach:

- A copy of the research proposal
- A copy of the consent form to be given to participants
- A copy of the information sheet to be given to participants

Appendix D

**Interview Questions for Law Enforcement Officers**

1. How serious is Illegal, Unreported, and Unregulated Fishing (IUUF) in the Philippines, and what role does your agency play in preventing it?
2. Recently, the Philippines has adopted the UN-FAO Port States Measures Agreement (PSMA); what role does or will your agency play in implementing the PSMA?
3. How well prepared is your department to implement the PSMA? on a scale of 1 to 5?
4. Do you have sufficient capacity to implement the PSMA in terms of assets and human resources? If not, what do you need?
5. Have your personnel received specialized training to undertake PSMA-compliant inspections? If yes, could you please specify the type of training that members of the boarding and inspection teams received?
6. Have you encountered any specific barriers or challenges as you prepared to implement the PSMA? If yes, please describe.
7. Are there any other Philippine Government agencies/departments involved in the implementation of the PSMA? If so, do you coordinate/cooperate/share information with them? What is the status of interagency collaboration?
8. In general, how prepared is the Philippines to implement the PSMA?
9. Provided it is implemented effectively, do you think, the PSMA will be an effective deterrent to IUU fishing?
10. Are you aware of gaps or weaknesses in the PSMA that could compromise its aim to deter IUU fishing? If yes, please explain.

**Interview Questions for the members of the Boarding Team**

(Ctrl)

1. How familiar are you with the provisions of the Port State Measure Agreement, on a scale of 1 to 5? (with 1 being not familiar at all and 5 being fully aware).
2. Have you received training to implement and conduct inspections aboard foreign-flagged fishing vessels? If yes, who conducted the training?
3. Do you work with other government agencies and share information with them that is useful for implementing the Port State Measure Agreement?