



Beyond Maritime Security

Executive Report



Report Prepared By

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Top left cover photo of Philippine fisherfolk casting a net by Aris Leoven, Studio Philippines. Lower right cover photo of Nelly Wenceslao, renowned woman fisherfolk from Davao by the [Davao Oriental](#) Local Government Unit Official Website.

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Executive Summary

Beyond national security and sovereignty issues, the maritime situation in the West Philippine Sea has immediate and long-term implications to Filipinos' livelihood and food security, as well as to the sustainability of the country's marine resources. *Beyond Maritime Security* aims to amplify awareness of these issues, particularly the protection and sustainability of fisheries, climate change and its impact on the blue economy. The two-part webinar series held on **6 October 2021** and **26 November 2021** brought together international and local experts to tackle these topics. Members of the Philippine Government, the academe, diplomatic missions, non-profit organizations, military/uniformed services, private sector and think tanks from all over the country attended the event.

The first webinar titled *Beyond Maritime Security: Protection and Sustainability of the Fisheries Sector* highlighted the global and local challenges of the fisheries sector as well as government and civil society initiatives to address these problems. The webinar's focus on this sector is premised on the Philippines' dependence on aquatic resources for trade, livelihood, and food security. The second webinar titled *Marine Environment & Climate Change: Impact on the Blue Economy* highlighted the present challenges of the sector, one whose economic value is grossly untapped and whose viability is threatened by climate change. The webinar discussed national and local measures, including ways forward in promoting sustainability in the Philippines' blue economy sector.

Among the recommendations presented were an integrated, whole of society approach to ocean governance to protect the fisheries sector. Responding to enforcement challenges in Illegal Unreported and Unregulated Fishing (IUUF) and poaching require increased engagement with stakeholders or participatory governance. Long-term planning for the sector, including exploring options, i.e., scaling back development or transitioning to a higher-value sector, was also proposed. Meanwhile, the crucial role of regional cooperation in developing the blue economy was highlighted given the transboundary and complex nature of the challenges in the sector. Innovative solutions, alongside community engagement and better governance were suggested to be equally important. Lastly, educating Filipino citizens, especially the youth, on the opportunities and challenges of the blue economy to build durable support for the sector was foregrounded.

Table of Contents

Introduction	4
Summary of Activities	5
Key Takeaways	
Webinar 1:	7
<i>Protection and Sustainability of the Fisheries Sector</i>	
Webinar 2:	10
<i>Marine Environment & Climate Change:</i>	
<i>Impact on the Blue Economy</i>	
Key Policy Recommendations	14

Introduction

The South China Sea (SCS) has long been one of the most important trade routes in Southeast Asia. It has abundant fishing grounds and extensive oil and natural gas, and mineral deposits are suspected in its seabed. The territorial affiliation of many islands in the SCS, especially in the West Philippine Sea (WPS), is controversial between and among neighboring countries. In recent years, there have been repeated incursions in the WPS, which denotes the eastern part of the SCS and includes the Exclusive Economic Zone (EEZ) of the Philippines.

Beyond territorial discrepancies and national security interests, questions arise about rights and obligations of states in relation to environmental protection, fisheries and food security, protection of indigenous peoples, climate change, disaster relief and biodiversity which altogether has economic and sustainable development impacts to states concerned.

To put focus on these issues, the Friedrich-Ebert-Stiftung (FES) and the German Embassy in Manila, in partnership with the Foundation for the National Interest (FNI) and Amador Research Services (ARS) organized a webinar series of policy discussions with international and local experts on the protection and sustainability of fisheries and marine environment & climate change and their implications to the blue economy. It is designed to provide an overview of the downstream implications of the territorial questions and identify critical interventions for policy action and future cooperation. The specific objectives include:

1. Find out the priority areas of the Philippines in protecting the marine environment, promoting the blue economy, and sustaining the fisheries sector.
2. Determine the policies and programs that should be adopted and supported in the aforementioned areas.
3. Discover technologies and tools that can help support efforts in marine environment protection and preventing IUUF.

Summary of Activities

The first webinar titled **“Beyond Maritime Security: Protection and Sustainability of the Fisheries Sector”** held on 6 October 2021 highlighted the global and local challenges of the fisheries sector as well as government and civil society initiatives to address these problems. The webinar’s focus on this sector is premised on the Philippines’ dependence on aquatic resources for trade, livelihood, and food security.

The speakers in the event were:

- **Undersecretary Cheryl Marie Natividad-Caballero** of the Bureau of Fisheries and Aquatic Resources Department of Agriculture (BFAR) who spoke about BFAR’s initiatives on protecting the Philippine fishing industry.
- **Atty. Rose-Liza Eisma-Osorio**, the Legal and Policy Director of OCEANA Philippines, who presented the state of the Philippines’ fishery sector and OCEANA Philippines’ activities.
- **Professor Christian Bueger** of University of Copenhagen who discussed policy issues and challenges of the fishery sector across four paradigms: maritime security, blue economy, ocean health, and blue justice.

The event was attended by over **forty (40) participants** from government agencies, the academe, media, international and local non-profit organizations, private sector, and representatives from foreign Embassies based in Manila.

The second webinar titled **“Marine Environment & Climate Change: Impact on the Blue Economy”** held on 26 November 2021 highlighted the present challenges of the sector, one whose economic value is grossly untapped and whose viability is threatened by climate change. The webinar discussed national and local measures, including ways forward in promoting sustainability in the Philippines’ blue economy sector.

The speakers in the event were:

- **Undersecretary Analiza Rebeulta-Teh** of the Department of Environment and Natural Resources (DENR) presented the state of the blue economy and government initiatives.
- **Dr. Roland U. Mendoza**, the Dean of the Ateneo School of Government shared current technologies to improve the blue economy as well as policy directions to be undertaken to support its growth.

- **Mr. Terence Dacles** from the German Agency for International Cooperation (GIZ) shared GIZ's implementation of sustainable coastal protection and biodiversity conservation projects in the Philippines, particularly in response to challenges of marine litter and mangrove deforestation.

The webinar was attended by over **a hundred (100) participants** both on the Zoom platform and on Facebook livestream.

Key Takeaways

Webinar 1: Protection and Sustainability of the Fisheries Sector

A. Current state of the Fisheries' Sector

The Philippines is a top producer in the global fisheries industry.

Usec. Natividad-Caballero reported that the Philippines is the 8th top fish producing country in the world, the 11th largest producer in aquaculture, and 4th largest producer of aquatic plants.

However, the fisheries sector is experiencing a decline.

Atty. Osorio noted that the national fisheries production from 2008 to 2017 follows a declining trend. The situation is similar at both the commercial and municipal production levels. This is alarming as the Philippines is one of the top five countries that are most dependent on marine ecosystems for livelihood and food security.

The decline is brought about by a variety of challenges both in production and governance.

As the Philippines face the challenges of IUUF, overfishing, and marine habitat destruction, governance capacity is likewise a problem. Atty. Osorio shared that despite the ratification of RA 10654 or the Fisheries Code amendment, as well as other game-changing environment and marine protection laws, these have been weakly implemented. Some challenges include:

- Multiple agencies tasked with fishery management and have overlapping functions;
- Data deficiency for monitoring and enforcement; and
- Weak policy making that is not based on science and public participation.

B. Government and Civil Society Initiatives in the Fisheries Sector

Integrated Maritime Environment Monitoring System (IMEMS).

IMEMS is a monitoring tool of BFAR that will complement the Government's efforts to address, prevent, defer, and eliminate IUUF. Usec. Natividad-

Caballero shared that the project aims to create a sustainable and safe Philippine industry through active management and control of the fishing vessels' activities, automatically detect illegal activities, and track and monitor fishing catches and landings. The data generated from the system will be streamed to a central database that will be used for data fusion, analytics, and management, with an end goal of an efficient and effective fisheries management that is compliant with international and regional fishery regulations.

Collaboration with other agency members of the National Task Force in the West Philippine Sea (NTF-WPS).

Aside from surveillance and monitoring, BFAR collaborates with other agency members of the NTF-WPS to effectively enforce the Fisheries Law, ensure the sustainability of the fishery sector, and address IUUF, including poaching by foreign nationals. Usec. Natividad-Caballero shared that the BFAR has issued a policy guideline (Fisheries Administrative Order 200-1, s. 2021) to implement Section 91 of the Fisheries Code relating to poaching in Philippine waters which will be implemented by composite teams of law enforcers in the WPS.

OCEANA has initiated policy engagement and advocacy, lawsuits, and public awareness campaigns in the Philippines.

Atty. Osorio mentioned several examples, such as advocating for protection of the Benham Bank, a ban on Bottom Trawling, ending commercial fishing in municipal waters, and development of fisheries management areas and scorecards, among others. OCEANA also initiated a vessel monitoring system, "Karagatan Patrol", an online platform for reporting of illegal fishery activities and mapping of fishing vessels which the authorities also use for law enforcement.

OCEANA also uses technology to train fisherfolk and increase their knowledge and understanding on the Fishery Law and improve their capacity as Marine Rangers or *Bantay Dagat*.

C. Policy Recommendations

Conduct an integrated whole of society approach to ocean governance challenges.

Prof. Bueger noted that different ocean governance challenges intersect (i.e. maritime security, illegal fishing, environment degradation, and inclusive “blue” economy) and yet are addressed in separate discourses and programming rather than approached holistically. He recommended building bridges and linking approaches, programs, and policies across the paradigms.

Improve enforcement of fisheries law through increased engagement with stakeholders or participatory governance.

Usec. Natividad-Caballero said that there is still much to be done in the implementation of the Fisheries Code especially in communicating and relating to the locals the current challenges, particularly the fish catch situation. One recommendation was to engage the fisheries and aquatic resource management councils (FARMCs) and the local government on the VMS/IMEMS initiative.

Relatedly, Atty. Osorio underscored that aside from enforcement of laws, there is a need to empower coastal communities to report irregular activities. It was underscored that it is important to work alongside local government units to ensure the protection of municipal waters from commercial fishing through supporting Local Government Units (LGUs) in resource allocation and establishment of mechanisms in order to protect their territory.

Conduct long-term planning for the sector noting irreversible conditions.

Prof. Bueger suggested adopting a long-term perspective that looks beyond protecting fish stocks or fighting illegal fishery but to have a fundamental discussion on degrowth and how to scale back industrial activity, including transition of fisher folk to different professions, noting that the current reality is that the fish stocks are already depleted.

Webinar 2: Marine Environment & Climate Change: Impact on the Blue Economy

A. State of the Blue Economy

Developing the blue economy as part of the national economic strategy is critical.

As Dean Mendoza presented, the Philippines' maritime zones account for 86.3% of its total territory. It is the second largest archipelagic country in the world and 70% of the Coral Triangle are found in the Philippines' territory. In addition, global statistics show the country has the 10th largest fishing catch, 4th largest shipbuilding industry, and leading provider of global maritime manpower. Usec. Teh added that blue economy sectors such as coastal and marine tourism, fisheries, aquaculture, ports, and shipping contribute a total of PhP 6.7 billion to the Philippine economy.

The blue economy has a potential to be a high value industry.

Dean Mendoza shared that the monetary value of marine ecosystems can contribute an estimated \$970 billion to \$1.5 trillion per year (in PPP USD, 2007 prices) to the Philippine economy. As such, it is imperative to develop the sector which has historically been underinvested.

However, the sector is highly vulnerable to the effects of climate change.

Usec. Teh reported that natural disasters have damaged the agriculture and fisheries sectors amounting to PhP 12.43 billion between 1990 and 2000. She cited research on the epidemiology of disasters which forecasts the Philippines losing 6% of GDP every year until 2100 if climate change risks are disregarded. This can be reduced to 4% if the Philippines will start to invest in climate change by 2020.

Poor maritime sector governance.

Aside from climate change, the Philippines faces degradation of coastal ecosystems such as degraded reefs, threatened fish species, and illegal fishing in municipal waters. Equally problematic is the poor governance of the maritime sector by certain local governments, which range from allowing unsustainable resource extractions, poor understanding of marine science and ecosystems, to poor tourism practices.

B. Potential technologies

There are several international technologies that can be adopted in the Philippines.

Technologies such as vertical ocean farming, ocean-based renewable energy, and marine biotechnology are opportunity areas. Dean Mendoza noted that industrial development in the blue economy also contributes to national security. An example is ship building which the Philippines already has expertise in assembly and manufacturing. The challenge lies in developing high-value upstream (research and development, design) and downstream (marketing, sales, service) capabilities.

The Philippines has a lot of potential in high value areas such as seabed mining. The potential of the Philippine Rise as a source of natural gas and other heavy metals was advanced. **Another technology is ocean energy thermal conversion** which according to a Mindanao State University study, Philippine ocean resources could generate as much as 170,000 megawatts of power, or ten times the peak demand in 2019.

C. Government and Civil Society Initiatives to Support the Blue Economy

Towards transitioning to the Blue Economy, the DENR is already implementing several initiatives.

Usec. Teh underscored DENR's adoption of technologies in the fisheries and aquaculture sector, promoting ecotourism and green tourism facilities, development of sustainable and green ports, and investing in research and development of emerging blue economy industries such as marine renewable energy, biotechnology, and shipbuilding.

Integrated coastal management (ICM) as a national strategy.

According to Usec. Teh, DENR is pursuing ICM as a strategy to ensure the sustainable development of the country's coastal and marine environment and resources. This includes integrating ICM in the education curriculum, training for local governments, environment, and natural resources accounting, and establishing an information management system. Some of the current programs of the Philippine Government include the Coastal and Marine Ecosystems Management Program (CMEMP), Establishment and Strengthening of Marine Protected Areas, and Biodiversity-Friendly and Social Enterprise Development.

Civil society organizations have successfully implemented local initiatives on the ground.

Mr. Dacles shared that GIZ's initiative on marine litter, 'Rethinking Plastics Project', focuses on circular economy solutions. The project supports the international aspects of EU Plastics Strategy in East Asia and Southeast Asia. He imparted various successful and innovative initiatives that GIZ has implemented in partnership with nonprofit organizations and local communities. One example is the 'Nothing is Wasted' or *Wala Usik* Economy Project which supports micro-, small, and medium enterprises in innovative circular economy approaches and plastic reduction initiatives. The project integrates social marketing strategies to localize the initiatives in order to shift the behavior of communities towards sustainability.

GIZ utilizes public-private partnerships in solving the challenge of plastic wastes and ghost nets in coastal and mangrove forest.

Its partner, the Zoological Society of London, has engaged international companies to receive collected and cleaned discarded fishing nets in the Philippines for supplying to the global nylon carpet tile chain.

GIZ also supports the government through the DENR's Coastal and Marine Ecosystems Management Program (CMEMP).

The program mainly focuses on mangrove rehabilitation and protection. Some of the components include: a baseline fishpond inventory system, conversion of abandoned fishponds to mangrove forests, promotion of mangrove greenbelts, and establishment of integrated eco-parks and protected areas.

D. Policy Recommendations

Regional cooperation is crucial in developing the blue economy given the transboundary and complex nature of current challenges.

Usec. Teh explained that regional cooperation offers a pathway for establishing meaningful partnerships, effective follow-up and review, and inclusive sharing of experiences across stakeholders and countries.

Education, including raising awareness of the opportunities and challenges of the blue economy, will build durable support for the sector.

Dean Mendoza emphasized the importance of educating young people on the blue economy. He believes that it could be through education tourism, or it can be also integrated in the Filipino youth's education. It must also include practical concepts on the country's sovereignty and how losing it can affect livelihoods and the bigger economy, for example. He suggested a policy mandating education on the blue economy as part of the general education curriculum.

Community engagement at the grassroots level should be a priority strategy.

Mr. Dacles stressed prioritizing grassroots and local communities engagement and reiterating the important link between a clean and healthy ocean and environment and safety and health, as experienced during the pandemic.

Relatedly, it was recommended to pursue marine spatial planning (MSP).

Dean Mendoza recommended conducting marine spatial planning in developing a blue economy sector, an integrated framework for management that requires engagement of multiple actors and stakeholders at various governmental and societal levels. MSP allows for inclusivity and transparency in decision making, making it more credible, acceptable, and better governed given stakeholder participation.

Reform actors and key reforms in ocean governance at the local government level are critical to developing the blue economy.

Dean Mendoza noted that while the implementation of the Mandanas decision will give rise to opportunities in developing the blue economy at the local level, the quality of governance at the local levels is quite diverse. Advancing the blue economy will require deep governance reforms. Some pathways include showcasing best practices from other local government units or electing leaders who will prioritize key reforms to support the blue economy.

Key Policy Recommendations

Empower and build partnerships with local communities and LGUs

1

A common theme across the two webinars is the important role of communities and local partners in enforcing laws, monitoring illegal activities, and implementing various environment programs. To promote a sustainable fishing industry and grow a blue economy industry, buy-in from these stakeholders should be secured. This may involve providing incentives, capacity building programs, and education on the implications of negative practices.

Research and development through public-private partnerships and regional cooperation

2

Another common insight from the discussions is the under-exploited economic potential of the Philippine seas and resources, not only aquatic but also extractive resources. The Philippine Government should prioritize building partnerships and seeking investments for marine exploration and research and development. Developing the blue economy should likewise be a key strategy in a broader economic development strategy. Regional cooperation is certainly a pathway for joint blue economy research and technology sharing.

Develop a roadmap for the blue economy

3

Experts in both webinars recommended adopting a long-term strategy that utilizes a whole-of-society approach in resolving challenges of the fisheries and the blue economy sectors. One of the more specific recommendations was to conduct marine spatial planning in analyzing current and future marine activities and allocating resources and marine areas for specific use.



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