

## Symposium Proceedings

### **Establishment and operation of Northern Pacific Seaboard Fisheries Management Area in the Philippine waters**

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#### **Abstract**

By virtue of Fisheries Administrative Order 263 series of 2019, the DA-Bureau of Fisheries and Aquatic Resources (DA-BFAR) promotes the establishment of 12 Fisheries Management Areas (FMAs) in the country for the conservation and management fisheries in Philippine waters. The FMAs were delineated based on considerations of stocks boundary, range distribution and structure of fisheries. It calls for a new era of fisheries governance in FMAs through the adoption of an ecosystem approach to fisheries management, establishment of a management board (MB), application of science-based fisheries management, and putting emphasis on the important role of Local Government Units in fisheries management. The Northern Pacific Seaboard, also known as FMA1, is the biggest management area covering 50,534,500 hectares encompassing 11 provinces. As start-up activities for its establishment, DA-BFAR staff were capacitated, information on the FMA were compiled and popularized and stakeholders were engaged. Further, the stakeholders were convened and the MB composed of multi-stakeholder representatives which shall serve as the governing body was organized. The Science Advisory Group, who shall provide technical and scientific advice to the MB was also organized. The Northern Pacific Seaboard FMA is now halfway on its organization and moving towards making it functional. As the system is still new and the roll-out just commenced, challenges in the implementation especially at this time of pandemic are inevitable but these can be addressed with the continuous cooperation among the local governments, national agencies and stakeholders.

Key words: ecosystem approach to fisheries management, Fisheries Management Area, Northern Pacific Seaboard

## **INTRODUCTION**

The Philippines is known for its diverse and bountiful aquatic resources. With its 2 million Exclusive Economic Zone and around 37,000 km coastline, the WorldAtlas classified it as the fifth longest in the world. The rich resources include coral reefs, seagrass and mangroves as well as numerous species of marine aquatic organisms.

Several management strategies have been developed and implemented to oversee these resources starting from centralized to decentralized up to community-based management, involving local residents. With all the resources and despite all of efforts on the management, the Philippine waters is not spared with all activities that led to its deterioration.

In order to step up with the management, the country,

through the Department of Agriculture - Bureau of Fisheries and Aquatic Resources established the Fisheries Management Areas (FMAs). There were 12 FMAs that were formed and implemented, of which the FMA 1 covers the Kuroshio Current along the Northern Pacific Seaboard.

#### **Development of Fisheries Management Areas (FMAs)**

Starting 2016, several activities were undertaken to develop and plan the FMA implementation (Fig. 1). Cluster workshops with stakeholders and NAMRIA were conducted to discuss the delineation of FMAs. After which, a thorough discussions on the drafting of proposed Fisheries Administrative Order followed by its presentation and deliberation. With the approval and endorsement of the National Fisheries and Aquatic Resources Management

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Council in November 2018, the adoption of DA-BFAR, planning and target setting for roll-out followed in 2019. With the adoption of FAO 263, “title”, the organization and operationalization of the 12 FMAs keep on.

### The Fisheries Management Areas

The FMAs, as defined by the FAO 263, is a bay, gulf, lake or any other fishery area which may be delineated for fishery resource management purposes. The FMAs were special delineation of the Philippine waters at an appropriate ecosystem scale of management, hence it was delineated based on the considerations of stocks boundary, range distribution and structure of fisheries.

The FMAs are implemented based on the following principles: (1) adoption of ecosystem approach to fisheries management (EAFM); (2) establishment of management board (MB); (3) more science-based approach; and (4) delineates role of Local Government Units (LGUs) in fisheries management.

The EAFM is a management strategy that balances the ecological and social well-being anchored in good governance (Staples et al. 2014). With this, the management of resources ensures the conditions of the three components. To properly manage each FMA, an MB composed of representative from different sectors (DA-BFAR, LGU, municipal fisheries, commercial fisheries, processors/traders, aquaculture, indigenous people, non-government organization, Protected Area Management Board Chairperson and Integrated Fisheries and Aquatic Resources Management Council). The MB, led by the DA-BFAR Regional Director of the lead region and co-chaired by the Local Chief Executive of elected LGU representative, is tasked to develop and implement an EAFM Plan for the FMA as framework to guide the actions of BFAR, LGUs and other stakeholders within the established FMA. Further, a Science Advisory Group (SAG), composed of technical experts is formed to provide technical advice to the

MB based on the data gathered from the science providers. With the FMA, the roles of LGUs in fisheries management were further delineated while retaining their power to manage and implement regulations of fisheries in municipal waters.

### FMA1: Northern Pacific Seaboard

The FMA 1, also known as the Northern Pacific Seaboard is the largest among the 12 FMAs with 50,534,500 hectares encompassing 11 provinces with 20 identified key fishing grounds (Fig. 2). There are 11 established Protected Areas under the National Integrated Protected Area System. These add to the diverse resource within the FMA. As per clustered information from 2015 - 2018, the dominant species in FMA1 based on monitored landed catch of the National Stock Assessment Program are: tuna, mackerel, scad, anchovy, sardinella and squid in commercial fisheries while shrimp, anchovy, tuna and scad in municipal fisheries.

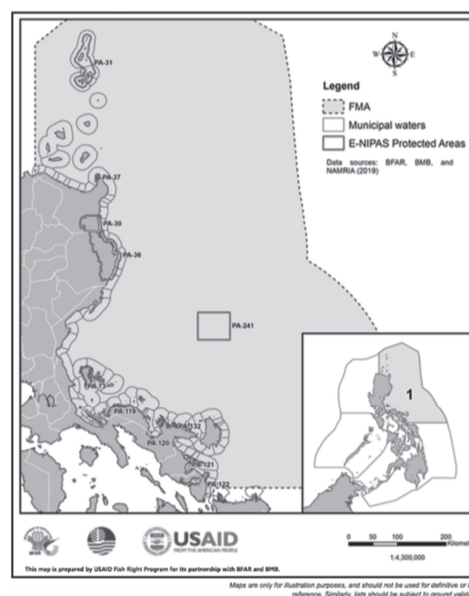


Fig. 2. FMA coverage (source: USAID Fish Right Program).

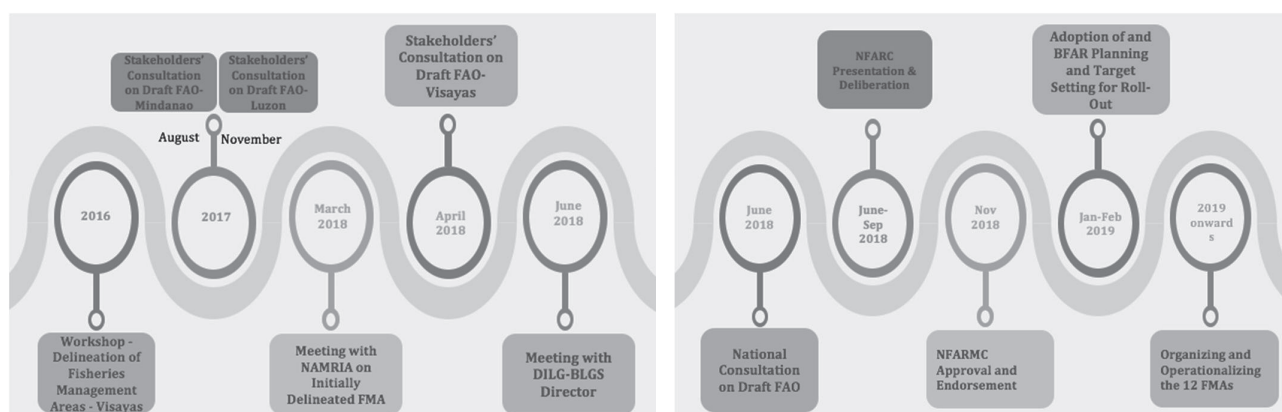


Fig. 1. Development of FAO 263 (source: DA-BFAR FMA Official Presentation).

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In terms of its governance mechanism, the FMA1 organized and established its MB in 2021 following the recommended composition of the board (Fig. 3). It is chaired by the Regional Director of DA-BFAR Region 2 as the lead region and co-chaired by the LCE of LGU Dingalan, Aurora. The MB meets on a quarterly basis to discuss relevant agenda for the management and operation of FMA1. The FMA is supported by the Working Groups who act as Secretariat or specific sub-group and the SAG for the technical advice on the science matters. A group of science providers from the academe and research institutions was organized to generate scientific information and recommendations to the SAG.

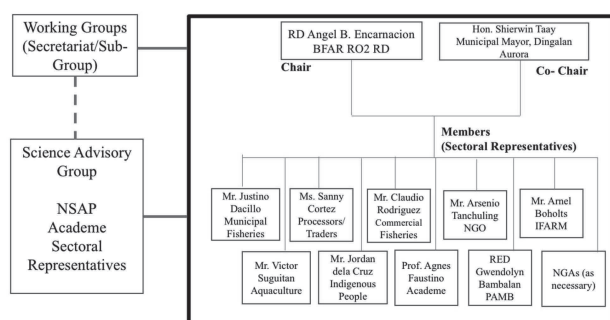


Fig. 3. FMA 1 Management Board (as of November 2021).

### FMA 1 Accomplishments and Plans

The FMAs are guided with several activities (Figure 4) in order to make it operational. The FMA1 working group already capacitated its member DA-BFAR Regional Offices through a series of orientation seminar. The FMA concepts were also popularized to the different stakeholders and started engaging them. Several information and documents were collected and compiled for use in the preparation of the FMA1 Framework Plan.

In organizing the FMA, key stakeholders were convened and oriented where the selection of sectoral representative took place forming the MB and SAG. The MB and the SAG

convened on a regular basis. Following a series of consultation and workshop the FMA1 Plan was developed. The Science Providers provided scientific information which was used in the establishment of reference points of key species to which the SAG developed the Harvest Control Rules for the adoption of MB.

The MB is now working on making the FMA 1 as it works closely with the LGUs within the area for the implementation of the 5-year plan as developed.

### Challenges and Opportunities in FMA1 implementation

With this management strategy, challenges in its the implementation are expected. As this covers a bigger space, the organizing and operationalizing activities will require more resources such as time, effort and money. However, this also offers opportunity to better manage the resources through EAFM, hence getting the right science, human dimension and control.

### REFERENCES:

- Department of Agriculture - Bureau of Fisheries and Aquatic Resources. 2019. Fisheries Administrative Order 263. Establishment of Fisheries Management Areas (FMAs) for the Conservation and Management of Fisheries in the Philippine Waters.
- Department of Agriculture - Bureau of Fisheries and Aquatic Resources; USAID. Toolkit on Rolling-Out Fisheries Management Area Implementing FAO No. 263, s. 2019. BFAR Toolkit on Fisheries Management Areas.
- Staples D., Brainard R., Capezzuoli S., Funge-Smith S., Grose C., Heenan A., Hermes R., Maurin P., Moews M., O'Brien C., and Pomeroy R. 2014. Essential EAFM. Ecosystem Approach to Fisheries Management Training Course. Volume 1 - For Trainees. FAO Regional Office for Asia and the Pacific, Bangkok, Thailand, RAP Publication 2014/13, 318 pp.

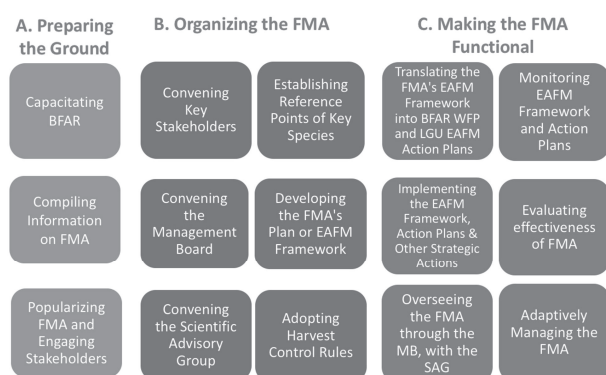


Fig. 4. FMA Activity Plan (source: BFAR Official Presentation).