

Introduction

The Philippines is the world's second largest archipelago with approximately 7,500 islands (Macaranas 2016) and more than 36,000 square kilometers of coastline. It has been declared the "Center of the Center for Marine Biodiversity" (Carpenter and Springer 2005). The exclusive economic zone (EEZ) is about two million square kilometers. The country faces the Luzon Strait to the north, Celebes Sea to the south, West Philippine Sea to the west, and the Pacific Ocean to the east.

The country is divided into three island groups: Luzon, Visayas, and Mindanao. It has 17 administrative regions and one autonomous region (Autonomous Region in Muslim Mindanao). There are 81 provinces, 144 cities, and 1,490 municipalities. More than three-quarters of the provinces and more than half of the municipalities are located along the coastline.

On April 12, 2012, the United Nations Commission on the Limits of the Continental Shelf affirmed the country's claims to the Benham Rise. An undersea region that is an extinct volcanic ridge covering an area of 13million hectares under the sea east of Luzon, and 35 meters underwater at its shallowest point off Aurora and Isabela (Alave 2012). Because the region is seismically active, the government is not yet exploring the possibilities of oil and gas deposits within the area. The Philippines is the sole claimant of the region, as the area is part of its continental shelf.

Due to the country's archipelagic nature, the variability of climate across the country is immense, and can be divided into at least 11 clusters (David et al. 2005, 1). These clusters are based on historic trends on sea surface temperature,

sea surface height, wind data, and precipitation, and were compared with global trends. The seasonal reversing monsoons (*Hanging Habagat*, *Hanging Amihan*) and the tidal and non-tidal circulations between the West Philippine Sea and the Western Pacific Ocean largely affect oceanic circulation around the Philippine archipelago (Wang et al. 2008). The islands of the Philippines are of volcanic origin, with numerous active volcanoes, making seismic activities like earthquakes, tremors, and volcanic eruption a relatively common occurrence.

As a majority of Filipinos reside along the coast, there is relative dependence on fisheries and aquaculture for livelihoods and protein. Based on the 2010 census, the country's population is at 92.34 million (Philippine Statistics Authority 2010), with 60 percent living along these coastal areas.

Fish accounts for 70 percent of total animal protein intake and 30 percent of total protein intake in the country (Asian Development Bank 2014). Based on the State of Coral Triangle Initiative report (Coral Triangle Initiative 2014), the fisheries sector accounted for at least 2.2 percent of the country's gross domestic product (GDP) and reached up to 4.4 percent in constant prices (2010). In 2011 the fisheries industry declined due to a decrease in production in both the commercial and small-scale fishing sectors. The study stated that fishermen in the Philippines belong to the poorest of the poor; in 2002 per capita income was at PHP11,906 which nominally increased to PHP16,841 by 2009.

The size of the Philippines' territorial sea (up to 12 nautical miles) is more than twice its total land area, and eight out of every 10 provinces are located in coastal areas. Based on the above mentioned information, it is quite surprising that the country's archipelagic nature has not been appreciated and emphasized in the policymaking agenda and planning initiatives of the government.

To govern all these areas, not a single legislative measure can match the profound impact of the 1994 National Marine Policy (NMP) as a "mega-policy." It lays the foundation of a truly maritime and archipelagic developmental regime fit for a proud race that is perpetually connected to its history and the world, by the sea.

The 1994 National Marine Policy and Related Policies

The 1994 National Marine Policy (1994 NMP) codifies the guiding principles of the Philippine government and its agencies in the development of coastal and marine resources. The development of the 1994 NMP arose out of the demands of a growing population and its subsequent pressure on resources, the need for poverty alleviation through investment in marine fisheries, ocean energy, and other related sectors, and, finally, the need to delineate the nation's territory in compliance with the United Nations Convention on the Law of the Sea (UNCLOS). This integrated strategy aims to account for and situate our long-term interests

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in our coastal and marine areas as well as international ocean affairs, reflecting the government's vision for the nation as a truly archipelagic state.¹

The 1994 NMP contains four policy areas: (1) Politics and Jurisdiction, (2) Area Development and Conservation, (3) Maritime Security, and (4) Area Regulation and Enforcement. These policy areas served as foundations for the guiding principles of the policy.

President Ferdinand Marcos signed EO No. 738 in 1981, establishing the Cabinet Committee on the Treaty on the Law of the Sea (CABCOM-LOS).² The then Ministry of Foreign Affairs became the coordinating agency in all matters related to the implementation of the treaty. The Secretariat of the Committee under the Ministry of Foreign Affairs was delegated as the supportive and administrative body which is responsible for the preparation of short-, medium-, and long-term plans for the development, conservation, and protection of the 200-mile exclusive economic zone (EEZ). The Secretariat was also tasked to prepare the groundwork for negotiations with other countries with which the Philippines had overlapping of boundaries, agreements on fishing, energy, and minerals.

The committee underwent a series of reorganizations following the transition of government from the Marcos regime. In 1994 the CABCOM-LOS was renamed to become the Cabinet Committee on Maritime and Ocean Affairs (CABCOM-MOA), and its mandate was expanded. CABCOM-MOA was responsible for the formulation of the National Marine Policy of the Philippines.

In 2001 CABCOM-MOA was abolished and its functions were transferred to the Maritime and Ocean Affairs Center, an attached agency of the DFA. In 2011 President Aquino issued EO No. 57 establishing the National Coast Watch System (NCWS) as the inter-agency body that serves as a coordinating body in charge of providing strategic direction of the country's maritime affairs.

Objectives of the Current Review

As technology advanced and has become increasingly digitized, and administrations came and went, so did the memory of the 1994 NMP. While programs and projects have been implemented to pursue the nation's marine and coastal interests, the 1994 NMP has been near irrelevant. Thus, this review of the 1994 NMP assesses whether the 1994 NMP was realized. An initial survey with government agencies, academics, and instrumentalities result in a consistent response: "What is the National Marine Policy?"

This document hopes to revive the words of the 1994 NMP, take the valuable information into the spotlight, and help ensure a sustainable, inclusive

¹ See Appendix 5: Comparison and categorization of different marine/ocean policies to the 1994 NMP.

² See Appendix 1: A Brief History of the NCWC.

development of the Philippines, both land and sea. This review is guided by the following objectives:

1. To develop a framework that is responsive to the development and strategic goals of the country's marine policy
2. To realize and demonstrate the commitment to international agreements and treaties, exemplifying the Philippines' commitment to the international community in marine issues
3. To assess the current accomplishments, gaps, issues, challenges, and opportunities in ocean governance, resource management, and the protection of the country's territorial integrity
4. To generate evidence-based data and information through field research and an extensive review of existing documents and literature
5. To harmonize scientific data with local knowledge and realities from the community level
6. To provide a sound strategic analysis and direction to the policy grounded on marine science, law, fisheries, politics and foreign policy, economics, governance, and engineering

While criticism of the implementation of the 1994 NMP is warranted, the independent efforts and programs of the various government agencies and local government units in implementing the policy are also recognized in the review.

Literature Review

The Philippines as an archipelago

The archipelagic nature of the Philippines embeds almost all elements of the nation in marine policy, as reiterated by Jay Batongbacal (2000, 37). Thus, strategic points for the country's marine and maritime governance must be developed (see figure 1).

The current difficulty in reformulating the Philippines' marine policy is due to the fact that the archipelagic configuration of the country makes such a policy extend to practically all aspects of the nation. The range of sectoral policies and interests that need to be reconciled and integrated into the revised policy is daunting on account of the complex interrelationships among them.

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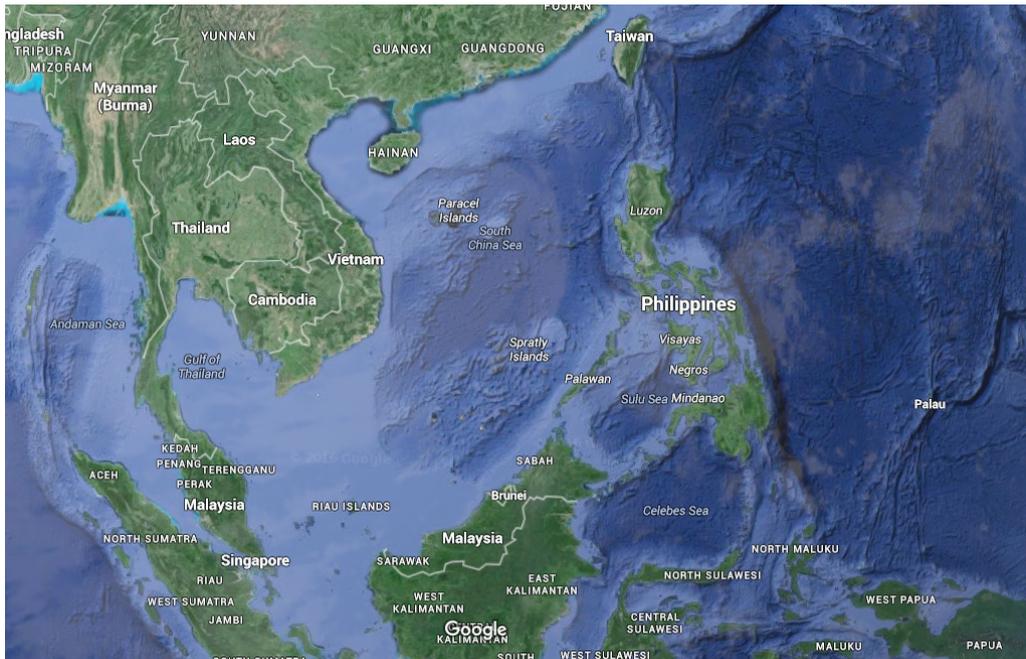


Figure 1. South-East Asian map placing the Philippines within a regional context, politics, and jurisdiction (Source: Google Maps)

The majority of the discussions about politics and jurisdiction in the context of marine and ocean governance lies in the various legislative and executive issuances which Batongbacal describes as “fragmented and uncoordinated” in an essay entitled “Reformulating the National Marine Policy” in which he states:

The policy declarations of the NMP are too few, broad, peripheral, and nebulous to provide any effective guidance to government agencies, and completely ignores the high probability of conflict and inconsistency between the sectors that use the marine environment. The CABCOM-MOA itself, under the chairmanship of the Department of Foreign Affairs, concentrates on responses to international incidents, rather than turning to an agenda for policy coordination, management and archipelagic development. (n.d.)

The 2005 study by Michael Lyndon Garcia on the implementation of the 1994 NMP suggests that domestic policies need to be consistent with the international legal regime for ocean management, citing the inconsistencies of the Philippine claims on territorial seas. These inconsistencies are drawn from the territorial sea limits defined by rectangular boundaries extrapolated from the Treaty of Paris (1898) and related treaties, all of which are drawn from the United States’ former ownership of the nation. Maintaining the Treaty of Paris’ limits as

territorial boundaries, rather than simply geographical references of the area, implies that the boundaries assume jurisdictional claim (Garcia 2005).

The Philippines is involved in territorial disputes: the claims on Panatag (Scarborough) Shoal, 220 kilometers west of Zambales in Luzon; parts of the Kalayaan Island Group (Spratlys) in the West Philippine Sea; and Sabah (Borneo). These maritime claims are not only a spatial issue, they extend to economic and security concerns as well. The necessity to maintain and preserve the national security of the Philippines is due to the perception of a threat to the survival of the nation. This links to economics in relation to the dependence of the Philippines on marine resources for employment, income, and food. To further understand the complexity of territorial claims, according to Garcia (2005), the best interest of the Philippines would be to work towards compliance with the Law of the Sea Committee (LOSC) to enhance the legitimacy of its boundaries and rights over marine territorial space and claims as the international law (currently UNCLOS, which overwrote the Treaty of Paris) to ensure optimal utilization of resources, and for clear and effective exercise of enforcement powers.

The ASEAN Community, of which the Philippines is a member, has three pillars: political-security community, economic community, and socio-cultural community. In an interview with Aileen Baviera on April 20, 2015, she emphasized the critical role of enhancing diplomacy in precluding any armed conflict as security and diplomacy are closely linked. This is essential to the protection and promotion of Philippine sovereignty and territorial integrity, which can be done by upholding international law, supporting the fisheries industry, and supporting the energy sector in sustainable resource use.

Baviera added that increasing the strength and capabilities of the armed forces allows for more efficient resolution of many issues the Philippines is currently facing, including territory, illegal fishing, monitoring foreign presence, human trafficking, poaching, piracy, terrorism, state conflict, vessel collisions, and impacts from natural disasters. Kraft et al. (2015) also stress the need to develop the country's military capability as the Philippines (citing the Scarborough shoal dispute in 2012) displayed itself to be reactionary rather than precautionary, which is contrary to what the 1994 NMP advocates.

A critical gap in literature covers information regarding shipping in the Philippines, as over 60 percent of all international shipping passes through the country's EEZ (Kraft et al. 2015). One study, however, focuses on the culture of shipbuilding in the country. According to Lim (2016), up until the 1980s boats built by the workers of Bajau/Samal, Boholano, Tausug, Muslims, and Christians in Mindanao were exported to Borneo, Sulawesi, Sabah, and Singapore. However, this eventually waned due to rapid deforestation that started during the late 19th century. The decimation of Philippine forests was the main reason for the decrease in supply of raw materials for boat building, such as hardwoods, rattan, bamboo, mangrove, guttapercha, and other kinds of wood.

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Transnational crime is another challenge. According to Palma (2010, 6), illegal activities like “the trade of illicit drugs, and illegal trafficking of arms and people,” coupled with concerns such as “territorial and jurisdictional boundaries, kidnapping of Filipino seafarers in the Gulf of Aden as well as maritime accidents and disasters” can be traced to poverty, improper implementation of laws and regulations, and corruption.

Palma (2010) noted that there is inter-agency cooperation to address illegal activities, such as those she has mentioned on both land and sea. This includes extensive cooperation with international organizations and other nations within the region. Palma stated that some of the issues that the Philippines will have to consider in the future include trafficking of human organs, controlling access to genetic resources, upholding the rights of fish workers, and the implementation of relevant international agreements, as well as the possibility of the setting up a regional Long Range Identification and Tracking (LRIT) Center.

Approaches to Marine Resource Management

Integrated coastal zone management refers to the strategy of an integrated approach to planning in the management of the coastal zone in which all policies, sectors, and, to the highest possible extent, individual interests are properly taken into account with proper consideration given to the full range of temporal and spatial scales involving all coastal stakeholders in a participative way (Hassanali 2014). Under EO 533, Series of 2006, the Philippines has made integrated coastal management (ICM) a policy for all development and conservation activities on its coastal areas as a “strategy to ensure the sustainable development of the country’s coastal and marine environment and resources, and establishing supporting mechanisms for its implementation.”

To an extent, the ICM serves as the framework for all laws and regulation concerning marine and coastal environment. However, even with the implementation of EO 533, environmental degradation persisted and conflicts among stakeholders in the coastal ecosystem ensued. A Stockholm Environmental Institute Working Paper in 2010 outlines the ICM paradigm, suggesting it embodies an assumption of the existence of an ideal equilibrium state of coastal ecosystems, but this is a top-down perspective and the reality of the diversity in stakeholder perspectives and agendas must be considered. If these higher agencies implement any ICM regimes without significant stakeholder buy-in, they will lead to failures and be assumed to only have interest in the local resources for exploitation (Larsen, Acebes, and Belen. 2010).

In the recent years the ecosystem paradigm has emerged as one of the most dominant approaches to managing natural resources to address separate governance regimes in various aspects and sectors of the environment. The shift

away from individual resource management to a systems approach is reflected in the actions of a number of states throughout the world, and in the work of international organizations such as the Food and Agriculture Organization and the United Nations Environment Program (United Nations Environment Programme 2006).

A study of the Palawan State University in 2013 funded by United States Agency for International Development (USAID) showed the prospects, opportunities, and gaps of the national laws and legislations in the country in relation to the ecosystem approach to fisheries management. The study found that while there is no specific ecosystem approach to fisheries management law or legislation, there have been efforts in the form of policies and programs to promote this type of management. Among the issues found were the conflicting thrusts and priorities between the 1998 Fisheries Code, 1997 Agriculture and Fisheries Modernization Act, as well as between the Fisheries Code and a number of local ordinances. According to the study, the policy of the government, expressed by Department of Agriculture-Bureau of Fisheries and Aquatic Resources (DA-BFAR), is primarily focused on production-oriented fisheries management (Palawan State University 2013) The study also found overlapping mandates of various institutions involved in fisheries management, stating a need for ecosystem approach to fisheries management (EAFM) to work within a more streamlined institutional arrangement, as the range of laws related to fisheries management has led to overlapping mandates of different bodies.

Environmental protection is largely focused on coral reefs and mangroves, with fisheries included. What is critically lacking is a scope on sustainable coastal energy sources. Currently, as shown in Kraft et al.'s study (2015), the Philippines relies heavily on one natural gas producer (Malampaya Sound) to power over 40 percent of Luzon. This site's natural gas is set to be depleted in 2021 without an alternative site recognized or established. While there is ideal opportunity, space, and technology for sustainable energy in the Philippines (wind farms, solar energy, wave power, hydroelectricity, etc.), unless action is taken speedily to implement these on a wider scale, a secondary gas source needs to be found to ensure the availability of power to the bulk of the nation (Guzman 2015).

Markets and Trade

Among the major areas in which regulation and enforcement remains a challenge in the marine sector is the fisheries and fish trade. A study by Pomeroy (2008) looked into the case of Palawan's Live Reef Fish Ordinance of 2005 and how it might be useful for other parts of the country. According to the study, the Palawan Live Reef Fish Ordinance of 2005 is relevant to the Live Reef Food Fish (LRFF) trade since coastal provinces like Tawi-Tawi supply a large percentage of the LRFF trade in the country. This study was also useful in the revision of the

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1998 Philippine Fisheries Code, specifically Section 61, which focused on live fish (Pomeroy et al. 2008).

This study on Palawan is one of the many examples of how the academe was able to influence policy making from a local situation to a national scope, specifically in the issues of fish trade.

Another trade-related issue is the cross-border maritime trade which has impact on the environment and economic as well as political sectors from the national to the local level.

“[A]ny policy reform will need to be implemented and enforced at the local level, and if local communities are more concerned about their healthcare or lack of economic access than the state of fisheries resources, they are unlikely to support a proposition that would strengthen regulation of cross-border trading. In a situation where governance is relatively weak or non-existent across a range of sectors that are fundamental to human wellbeing, it is unlikely that governance on what are perceived to be problems that are far less important to the community will be implemented. In a similar manner, policy that seeks to promote macroeconomic growth through increased levels of trade in cross-border regions is unlikely to realize prosperity for all at the local level.” (Fabinyi et al. 2014, 727)

Further, Fabinyi et al. (2014) suggest that perspectives focusing on livelihood and vulnerability need to be considered more seriously in policy discussions about economic development and environmental governance, especially in borderland areas. While better environmental and macroeconomic governance may be the desired outcomes often, social-development perspectives need to be prioritized within policy and governance, especially focusing on highly vulnerable communities.

Ocean governance in the high seas

While UNCLOS presents a framework for oceans governance, it does not address specific high seas planning issues comprehensively. While the duty of cooperation is the main premise to which UNCLOS is working, it did not build a mechanism to coordinate and discuss implementation issues or even promote compliance. But it allows for implementing agreements at both global and regional levels to address these issues, such as the UN Fish Stocks Agreement in 1995. Yet, many high seas fisheries are either not covered by this agreement or occur in areas not yet regulated by Regional Fisheries Management Organizations.

Andron and his colleagues (2008) wrote that two high sea activities that must be considered alongside fishing are shipping and waste dumping as they are regulated at the global level, but have limitations as serious gaps in authority

exist. Unregulated high sea fisheries, notably shark and tuna fisheries, bio-prospecting, marine research, and military activities were specifically mentioned. Specific provisions agreed at the global level relating to conservation and sustainable use of biodiversity, strategic environmental assessment, cumulative impact assessment, marine protected areas (MPAs), water quality protection (from activities other than shipping or dumping), and noise pollution are needed for the high seas. Carbon dioxide sequestering in the marine environment is alarmingly unregulated, yet seen in remarkable levels as well.

Benavente-Villena and Pido (2004, 15) have also weighed in on poaching:

First, the potential revenues earned from poaching in Philippine national waters far outweigh the constant threat of apprehension. Second, this situation also reflects the weaknesses in the prosecution of cases that has emboldened the poachers to continuously violate national integrity. The extent of poaching... necessitates that this issue be given more emphasis. The entry of foreign fishing vessels has led to the destruction of coral reefs and associated marine habitats. The dollar equivalent of illegally harvested fishery resources needs to be assessed accurately. There is also a need to look into poaching as both enforcement and prosecution issues.

Laws on Philippine waters are not often recognized by foreigners, especially those with outstanding territorial claims over several locations at sea. Either they lack the knowledge on these laws or enforcement is weak. Poaching and continuous foreign intrusion are manifestations of such ills.

Water transport utilities and other maritime enterprises in the Philippines are under the jurisdiction of the Maritime Industry Authority (MARINA).³ Several studies over the years have noted the different challenges and issues in regulating the maritime transport sector in the Philippines.

Development and Conservation in the Marine Environment

The application of sustainable development as an overarching framework is most appropriate. This is not only because of the definition of the sustainable development [“Development that meets the needs of the present without compromising the ability of future generations to meet their own needs,” (World Bank 2001)], but also because of the global shift towards this school of thought. This is most clearly seen with the amendment of the UN’s “Millennium Development Goals” into “Sustainable Development Goals” (SDG). Moreover, this showcases the global trends and allows the Philippines to support the policy suggestions within an international arena. The new sustainable goals, alongside

³ Laws on MARINA’s mandates: Presidential Decree 474, Executive Order 546, Executive Order 1011, Republic Act 9295, Executive Order 75, and Republic Act 10635

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the revised NMP, are both plans for action for humanity, the environment, and for prosperity to perpetuity.

While this document hopes to serve sustainable development for over 30 years, continual reviews of the policy and global developments need to take place to ensure that the policy does not fall by the wayside, like its predecessor in 1994. By implementing best practice management and utilizing the best possible data and information available, the revised policy plan can remain relevant, and may be altered to ensure that full protection is still offered in the future.

The Philippine marine environment is characterized by a series of ironies, according to Naz (2013). At least 62 percent of the Philippine population resides in coastal areas and more than 50 percent of animal protein consumed by Filipinos is marine; however, fisheries productivity is declining because of overfishing and poor enforcement of laws. There are over 27,000 square kilometers of coral reefs, but only less than 5 percent is rated as being in good shape.

The major threats encroaching on Coral Reef Ecosystem (CRE) health include sedimentation from improper land use, erosion from sea level rise, destructive fishing practices, and conversion of coastal ecosystems to others (e.g. beach resorts and unsustainable mariculture). The Philippines has approximately 978 square kilometers of sea grass beds in 96 sites, the second highest level of sea grass diversity in the world. But in the last 50 years, 40 percent of sea grass areas have been depleted. Mangroves are lost primarily due to aquaculture, but rehabilitation and replanting are ongoing. In 2010 only 26 percent of mangroves remain. Mangroves serve as a barrier to storm-surges that are linked closely to climate change and sea level rise. Information and statistics on the environment are limited, so there is a critical need for data generation.

Upon scrutinizing a number of studies and articles written about the marine sector in the Philippines, it is clear that the academe and mass media focus on conservation and coral reefs, especially MPAs, which shows the importance of these environments and can help demonstrate the importance to take the academic outlook and include it in policy through the sustainable development framework. MPAs help solve and abate the anthropogenic and climatic problems facing fisheries and marine ecosystems, such as overfishing, destructive fishing, runoff, poor land use and increased sedimentation from deforestation, and unregulated mining activities. Community-based MPAs, paired with integrated coastal management practices, are also seen as possible options in managing marine sanctuaries and marine wildlife reserves (Christie, White, and Deguit 2002).

MPA networks are the favorable option, allowing a cooperative approach to nationwide conservation (Kraft et al. 2015; Baviera 2015; Wedding et al. 2013). The implementation of MPA networks will inevitably provide a buffer against current and future threats to the environment, and should be designed to mitigate any other perceived threats. Furthermore, the establishment of MPA networks may reduce uncertainty about future restrictions in future land/sea

use, protecting existing claims. This integrated and collaborative approach has global implications for conservation in areas beyond national jurisdiction or other complex ocean zones.

Philippine seas have long been suffering from different types of wastes and pollution: domestic sewage, solid waste such as plastic, industrial discharge, urban and industrial run-offs, shipping accidents, oil spills, explosions, sea dumping operations, mining and agricultural run-offs, pesticides, waste heat sources, as well as radioactive discharge.

Greenpeace (2013) has reported serious waste problems and toxic, oil, and coal spills in the country. For instance, 1,800 tons of plastic trash was collected in Manila Bay in 2012. Moreover, toxic mine spills like Marcopper in Marinduque and Rapu-Rapu, the oil spill in Guimaras, and the coal spill off the coast of Pangasinan have gravely devastated important bodies of water and adversely affected the health, livelihood, and environment of nearby communities. In 2015 the Philippines was dubbed the third country with most number of ocean plastic pollution, next to China and Indonesia. Every year about 8 million metric tons of plastic reaches the ocean globally (Dunham 2015). As mentioned above, this review uses a ridge-to-reef approach and, therefore, all land-based activities that directly impact the marine environment should be taken into consideration.

According to DA-BFAR (Greenpeace 2013), 10 out of the 13 major fishing grounds in the country are already overfished. In 2011 the country implemented a fishing ban for sardines, the second most important commercial species after tuna. Also, while commercial fishing operations are banned within the 15 meter limits of municipal waters, commercial vessels are seen lurking within these limits, deploying highly destructive fishing methods and leaving little for local fishermen.

Illegal fishing practices, such as *muro-ami*, dynamite fishing, and extensive commercial fishing within municipal waters, are still rampant, especially those that devastate fish stocks, such as the use of trawlers and fishnets with less than two centimeter holes, and *payao*⁴ (Ranada 2014).

The Ramsar Convention includes coastal and marine wetlands such as coastal lagoons, coral reefs, estuaries, mangroves, sea grass beds, tidal flats, and other coastal bodies of water as fundamental areas for their economic, ecological, cultural, and scientific significance. Among the considered “wetlands of international importance” in the country are the Agusan Marsh Wildlife Sanctuary, Olango Island Wildlife Sanctuary, and the Tubbataha Reefs Natural Park.

⁴ A fish aggregating device that uses bright lights to attract big populations of fish

Maritime transport

As an archipelago, maritime transport is critical to the Philippines' integrated and coordinated transport network. The continuous capacity expansion of Philippine seaports and sea links has always been a development thrust of the country.

The Asian Development Bank studied the Philippine transport sector and gave the following comments:

Despite growth in both the economy and the population, passenger traffic on domestic inter-island shipping services fell by about 13 percent between 2003 and 2008. Freight traffic on inter-island shipping services has not grown in line with the economy and now stands at about the same volume as in the mid-1990s. (2012, 2)

The study noted the significant development of roll-on roll-off ferry services (ro-ro) which intended to interconnect the islands of the country. This system reduced the sea transport cost by eliminating cargo-handling labor and equipment.

It also mentioned that maritime transport in the country is marred by several issues. Poor port facilities for roll-on roll-off vessels, fragmented management of the roll-on roll-off sector, and the privatization of maritime transport sector were among the challenges mentioned. Inter-island shipping has a poor reputation for safety with an average of 160 maritime accidents yearly due to human error, natural causes, lack of vessel traffic management, lack of navigational aids, and poor ship maintenance (Asian Development Bank 2012).

But the ADB report (2012) also mentioned opportunities for development, like the country's nautical highways model, that can provide connections among the subregions suitable for trade and other economic activities.

Climate Change

According to the United Nations Framework Convention on Climate Change (1994), climate change refers to "a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods." In this sense, climate change differentiates the climate variability attributable to natural causes, and changes in climate attributable to human activities. The Philippines, recognized in a number of studies as one of the most vulnerable countries to the impact of climate change, acknowledges the implication of this vulnerability in almost all types of activities. Therefore, this review also takes into consideration ways to address human-induced climate

change, and to make the country resilient and adaptable to the risks posed by climate change.

As the threat of climate change looms over the country, it is difficult to discount its effects on Philippine marine resources. Ranada (2015b) suggests that there is a higher concern for climate change than there are for territorial disputes with China. The Philippines ranks sixth in the world for concern of the destructive impacts of climate change—as is it one of the most exposed to threats of a disrupted climate. This awareness is not reflected in the 1994 NMP. With a growing population and high level of poverty, much of the Philippines population is at high risk with increasing disasters and irregular weather patterns linked to climate change.

Among the expected impacts of climate change on Philippine marine resources is the warming of oceans, which could lead to coral bleaching and eventual death of various species of marine flora and fauna.

As per Reaser, Pomerance, and Thomas (2000, 1500),

The geographic extent, frequency, and regional severity of mass bleaching events are a result of increasing baseline ocean temperatures. These events will impact on those reliant on coastal resources. The suggestion provided to increase the monitoring of coral reef ecosystems, more research on projected and realized effects of climate change and measures to prevent greenhouse gas emissions. Even the best marine protected area is at risk of bleaching.

Further, the settlements in coastal areas are also at high-risk of natural disasters, even if these areas are the ones with rapidly growing populations. “This low area is approximately 2 percent land cover but 10 percent of world’s population. Reducing the risk of disasters related to climate change in coastal settlements will require a combination of mitigation, migration and settlement modification,” wrote McGranahan, Balk, and Anderson (2007, 17).

Review of National Policies⁵

There are existing national laws that clearly define the country’s objectives to enhance the development, protection, and conservation of marine resources, protect the rights of fisher folk, and engage the communities in fisheries resources management. The Philippines Fisheries Code (RA 8550) is one of these laws.

Other national laws include the Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (RA 6969), which points to area protection and conservation of marine resources, the National Pollution Decree of 1976 (PD 984),

⁵ See Appendix 8 for a more detailed discussion of coastal laws and policies and their provisions.

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the Water Code of the Philippines (PD 1067), and the Philippine Environment Code (PD 705).

The Environmental Impact Statement System law (PD 1586) mandates the establishment of an environmental impact statement system and other environmental management related measures to avoid endangering the environment, including marine resources. Similarly regulatory in nature and intent, the Marine Pollution Law (PD 979) is a policy that emphasizes and supports regulatory measures on marine waste management. The Mining Act (RA 7942) essentially regulates the management of mineral resources on land, but it is also meaningful to marine resource protection and management especially because the resource utilization on land inevitably affects water resources. A common example is when mine tailings run off into the ocean, affecting water quality and endangering marine life.

As some of the national policies share common objectives to promote development and to protect resources, including marine, a review of these laws and presidential decrees is in order mainly to identify the state of implementation of these laws, to identify the gaps in the implementation, and to polish the points of convergence and coherence of these policies.

The Local Government Code of 1991 (RA 7160) lays down and devolves the authority, powers, and responsibilities of governance and revenue generation to provinces, cities, and municipalities. These devolved functions include coastal resource management, solid waste management, and pollution control. While the operation of these responsibilities is local, the thematic concern of protecting the coastal environment and all resources is shared with the national intent of many of our coastal laws and enforcement.

Through a scoping workshop⁶ conducted among government agencies in July 2015, this study identified a common observation on the involvement of multiple agencies in the implementation of policies. For example, in the Philippine Fisheries Code, the following units are authorized to carry out the policy: the Philippine National Police (PNP), PNP-Maritime Group (PNP-MG), Philippine Coast Guard, the Bureau of Fisheries and Aquatic Resources (BFAR), and other national government agencies.

However, it was noted that there is little coordination and complementation of their functions, and much is desired in terms of clarifying the appropriate procedures to enforce the policy. In fact, according to the participants in the workshop, the number of personnel and other material resources, including communication equipment and vessels among others, impede effective enforcement of the policy.

⁶ See Appendix 2 for a more detailed discussion on the Scoping Workshop conducted May 11, 2015.

The concerned agencies in the scoping workshop recognize that a country such as the Philippines, which has porous borders, is vulnerable to the flow (entry and exit) of forces that threaten the security of our marine resources and the territory. The natural resources of the marine environment are threatened, as well as human resources, through trafficking and the smuggling of other goods. Under such condition, the technology, equipment, timely flow of information, and capability of our units and personnel are crucial. These must be sufficient, functional, and up-to-date to achieve responsive performance.

A revisit of these national laws and presidential decrees are in order precisely to determine the following:

1. Whether these national laws are upheld by and are consistent with local laws and ordinances. This is to determine whether there are laws that were passed without proper recognition and understanding of the existence and provisions of the national laws and policies.
2. Availability of information and that it is disseminated not only among local policymakers but also among the communities and other stakeholders so that all can engage in the policy implementation.
3. Convergence and consistency of land-based laws with marine and coast-related laws. There are laws applicable to and enforced on land that bear upon policies related to marine and coastal resources.
4. Some areas observe that a blanket law, such as the National Integrated Protected Areas System Act of 1992 (RA 7586) which defines the national protected areas, deserve to be reviewed in terms of: 1) the functionality of the law, and 2) its standard or uniform application in areas of the Philippines that have specific characteristics that determine their development and growth.
5. The MPA, which falls under the Department of Environment and Natural Resources (DENR), intersects with local planning and its enforcement should reasonably reckon with development and regulation specific to an area.

Overall, there is a challenge to monitor and evaluate (M&E) our national laws and policies, local ordinances, and other policies and how these are enforced. The M&E should be able to identify also the gaps, and how improvements could be made, either by enhanced implementation or by legislative action and measures.

Comparative review of international marine and ocean policies

To ensure a complete assessment of resources, this review utilized information from the Coral Triangle Initiative (CTI) paper on the Philippines along with the Archipelagic Development (ArcDev) proposed policy, and noted the national

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marine policies of China, Australia, Indonesia, Malaysia, and America in order to formulate a template for the context of the revised marine policy of the Philippines. When looking at the above listed policy documents, it is important to consider the context, especially in this comparative analysis, as the study is placing different settings onto the Philippines. This is a critical consideration in keeping the four pillars but transforming their reach to match global best practices while retaining subject-based considerations. This is presented in Appendix 5 in tabular form.

This assessment shows the 1994 NMP to have been an adequate framework to base this current review on, as most of the aforementioned documents used the problem-solving approach which is visible within the 1994 NMP. This was kept and expanded in the framework below. The assessment of the different policies also reinforces the continued use of the four pillars, alongside framing the issues within the overall input framework outlined below.

While the titles and some divisions of topics vary, it is clear that the cross-cutting themes of the policies work within the broad categories of the 1994 NMP. However, the recommendation from the UP Center for Integrative and Development Studies (UPCIDS) to use a problem-solving framework—a practical way to present the NMP in terms of progression from 1994 to the present, and continuing this trajectory into the future with proper guidelines and solutions—does not appear in the analysis. This model can be seen within the Australian AIMS study which is presented under two headings: “national challenges” and “responding to national challenges.” China’s policy is also presented in this format, looking at current status and opportunities and major problems, and connecting to a 2050 roadmap. While a study on archipelagic development also presents this framework with proposed mechanisms for implementation, it was not institutionalized. This problem-solving model allows for the policy revision to have a reflective nature while using the lessons learned to be the basis and justification for the current review and future roadmap.

Another decisive inclusion that can be taken from the abovementioned policies is marking dates within the policy for a review and including an “expiry date” on the policy. This is critical as it earmarks when the government review should take place, keeping a check on the policy and its relevance.

NMP Review Framework

The four policy areas stated in the 1994 NMP are adapted to serve as the framework for the review. These four pillars have been devised to include all aspects of any national policy and the specifics of the marine ecosystem. The four review pillars are (1) politics and jurisdiction, (2) marine security, (3) area regulation and enforcement, and (4) area development and conservation. It

should be noted that the 1994 NMP uses the term “maritime” instead of “marine” for one of the policy areas on security. But for the purposes of this study, the review pillar shall be called “marine security” for consistency.

This review includes a section on crosscutting issues and topics, specifically addressing climate change. Climate change is a prevailing variable that encompasses all the policy areas of the 1994 NMP.

These pillars are encompassed within the definition of human security by the UN Commission on Human Security (United Nations, Human Security Unit 2003, 4):

Human security means protecting fundamental freedoms—freedoms that are the essence of life. It means protecting people from critical (severe) and pervasive (widespread) threats and situations. It means using process that build on people’s strengths and aspirations. It means creating political, social, environmental, economic, military, and cultural systems that together give people the building blocks of survival, livelihood, and dignity.

Based on the literature review and the current status of the NMP, the parallel contexts now present two interrelated and tautological problems. One is that in order to determine whether current and active laws, programs, and policies are in sync with social realities, the policy framework surrounding them must first be assessed. The other is that in order to assess the policy framework, the implementation and outputs must be evaluated. And here, again, the question springs up: To what extent has the provisions of the national marine policy framework, as expressed in the policy, laws, and other rules, been implemented, and what success has been achieved?

For the benefit of this review, it is important to assure that six overarching inputs are taken into account in each pillar, namely: resources; enabling policies; interoperability; competency requirement; knowledge, learning, and education; and leadership. These were chosen on the basis of expert input and research themes. These inputs are necessary for the revised National Marine Policy to achieve inclusive growth and, eventually, sustainable development. This review also acknowledges that climate and disaster risk resilience is a crucial factor that influences the policies and outcomes of a marine policy and its implementation. By framing each review pillar within these inputs, this paper hopes to tie the national issues into a developmental paradigm in order to achieve overall growth for the nation.

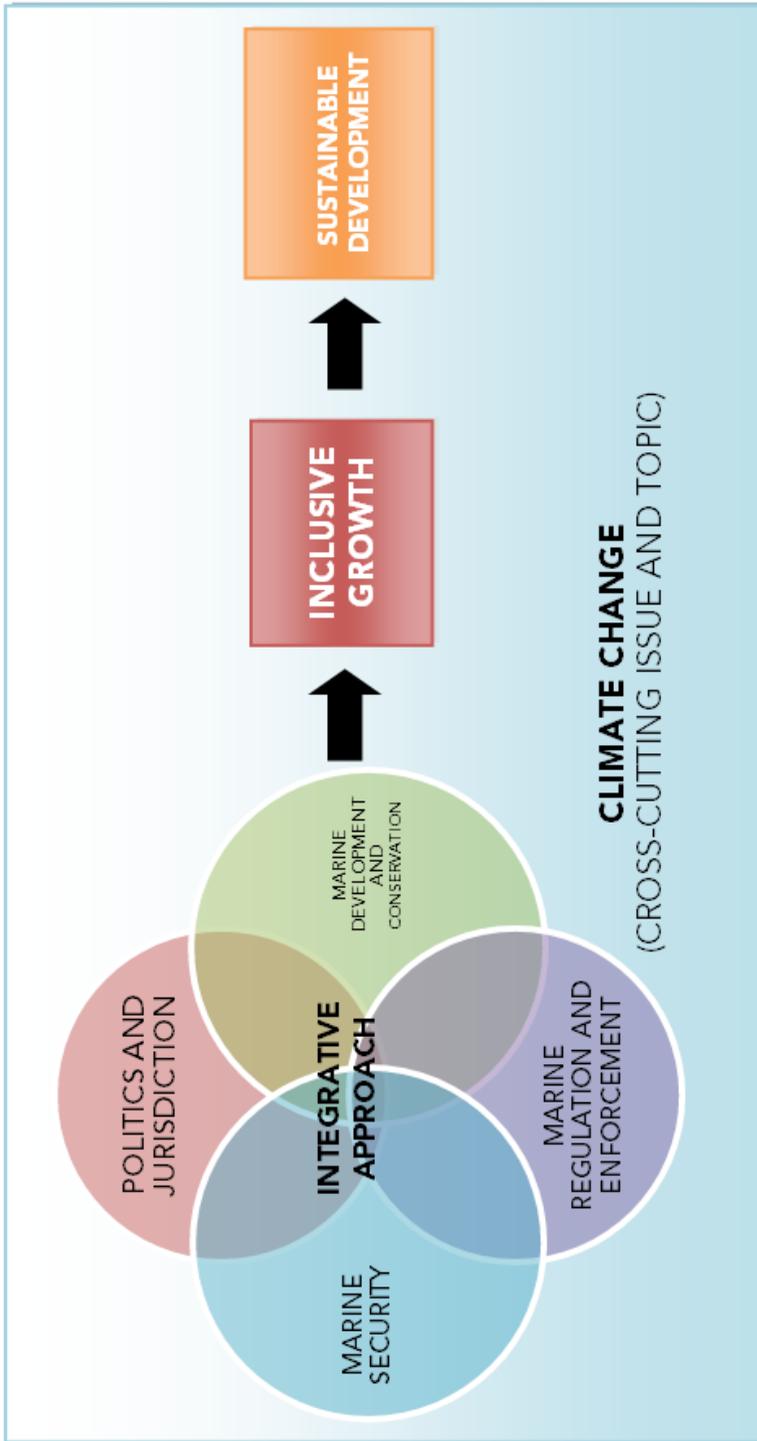


Figure 2. The National Marine Policy Framework, 2015

Politics and Jurisdiction

Jurisdictional concerns in the maritime domain are of two types. One is territorial or geographic jurisdiction, and the other is operational jurisdiction. The operational jurisdiction shall be covered by the section on regulation and enforcement.

Territorial jurisdictional concerns exist at both the international and national levels. At the international level, territorial jurisdictional concerns involve sovereign nations with conflicting territorial claims, including overlapping extended continental shelf and exclusive economic zones. At the national level, jurisdictional concerns exist at the provincial, city/municipal, and barangay levels. Jurisdictional concerns, based on geography and territory, begin with clear delineation of marine territory among states, at the international level, and among LGUs, at the national level.

The goal of having a clearly defined marine territory is to have a clear determination of rights over the use and utilization of marine domain and resources, and the determination of responsibilities for the development of marine domain and the protection and conservation of marine resources.

The objectives of having clear territorial jurisdictions are peace and harmony and conflict avoidance. Conflict avoidance may be achieved using policies that engender communication, cooperation, coordination, collaboration, and complementation. In cases of jurisdictional conflicts, negotiations, arbitration, and adjudications are policy tools that may be utilized to restore peace and harmony.

Marine Regulation and Enforcement

Regulation and enforcement involves operational jurisdictional concerns. Operational jurisdictional concerns exist between national government and LGU, and between or among national government agencies. People's organizations and NGOs also play key roles in regulation and enforcement of marine laws.

The key to effective and efficient regulation and enforcement is to have clear delineation of mandate and functions between national government and LGUs, and between or among national government agencies, and the active engagement of citizens, communities and groups in regulation and enforcement. Between and among agencies, there must be clear delineation of duties and responsibilities, and active participation in policies based on agency mandates or authority and based on agency specialization or institutional competence.⁷

⁷ These two aspects of operational jurisdiction are closely related and mutually reinforcing. Agency specialization should come from or developed out of the agency's legal mandate.

Clear delineation of mandate and functions means that mandates and functions must be reviewed to identify gaps, overlaps, areas of convergence, and partnerships. The goal is to facilitate cooperation and complementation towards achieving synergy and interoperability, as these lead to effectiveness and efficiency.

The assignment of functions and designation of roles must follow authority, competence, cooperation, and partnerships (ACCP). Designation of roles must be based on authority of the agency based on the mandate given to it by the law which created it. Institutional competence must be considered in the assignment of functions related to enforcement and regulation. When mission areas overlap, cooperation must be perused by the agencies involved. When agency mandates and functions compliment, partnership must be forged between agencies.

Regulation on the use of marine domain and on the utilization of marine resources must consider both enforcement and oversight. Enforcement involves the execution of rules, directives, guidelines, and parameters in the use of the marine domain and in the utilization of marine resources towards conservation, protection, and sustainability. Oversight, on the other hand, involves monitoring and evaluation of compliance to such rules, directives, guidelines, and parameters.

Marine Development and Conservation

Marine Development and Conservation is the broad and sustainable management of the marine space, the interactions between and among its uses. It balances the full utilization and development resources with the protection of marine resources. It aims to achieve social and economic gains for society without harm or threat to the ecosystem. Marine development and conservation adopts an ecosystem approach.

This pillar safeguards the different marine ecosystems, and the status of coastal and marine biodiversity. It addresses and defines the limits concerning regulation and facilitates a marine integrated development management plan. It facilitates the development of alternative energy sources that are renewable and environment-friendly, while addressing energy supply and economic opportunities. While it facilitates the development of alternative livelihoods and industries, it ensures that such activities are responsible and moderated. It taps into marine resources to increase productivity, alleviate food security, and ascertain necessary points of intervention in order to correct deficiencies.

Marine development also deals with investment in connectivity of various kinds – inter-island, international, land-water – as well as the promotion of tourism that is attuned to the environment. It also deals with investments in transport in a way that is dependable, integrated, secure, and efficient through a system-oriented approach.

Marine Security

Marine security involves ensuring the security of the country's maritime assets and zones to protect the Philippines as a nation from all threats, external or internal. In a broader sense, marine security pertains to human security.

Key to marine security is management, including the modernization of the armed forces of the country, investing in floating assets, and upgrading technology, including information and communication, to be responsive to the demands of efficient and effective communication of forces as well as citizens, and which is crucial to ensure marine protection and security.

The management of marine security entails a human resource pool that is qualified, competent, and professional. It also involves a league of leaders who are fit to lead and manage the country's marine assets and resources, including the safety of citizens. Marine leadership is expected no less to be benchmarked with the global standards of marine leadership. Continuing leadership education is important to the management of marine security.

Constant monitoring and evaluation of security activities are imperative to the management of marine security. While the marine leadership is at the forefront of security, the role of the citizenry as a partner in the periodic monitoring and exchange of information is necessary.

Marine security also defines the relationship through communication, collaboration, and if necessary, negotiation with neighboring countries on shared marine domain, resource, and stakes.

Definition of Terms

Marine development and conservation – Sustainable use of natural resources in a marine and coastal setting, reconciling the interests of economic progress and conservation to attain sustainable development. It includes factors that are crucial to enable or facilitate the development of a marine or coastal ecosystem, physical infrastructure, equipment, and facilities, as well as financial resources. Essentially, it entails the marriage of national development and progress framed within an ecological balance, creating a future for both marine industry and conservation of the ecosystems.

Marine regulation and enforcement – The realm of government agencies and units, their mandates, roles, guidelines, and practices, including their interoperability, as well as issues and concerns that affect the manner by which marine resources are governed and the manner by which various sectors or players affect each other's interaction in the marine landscape. This pillar is very closely related to the governance realm of policy.

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Climate change – “A change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods” (United Nations Framework Convention on Climate Change 1994, 2). In this study, the focus is the human-induced climate change (anthropogenic).

Competency requirement – Qualifications, skills, or abilities an individual or an agency needs in order to do a job or task properly.

Enabling policies – Plans, rules, laws, or similar instruments and any high-level course of action that embraces, engenders, fosters, and re-enforces the general goals of a particular objective or strategy.

Inclusive growth – Growth that “creates jobs, draws the majority into the economic and social mainstream, and continuously reduces mass poverty” (National Economic and Development Authority 2011, 18).

Inputs – Factors and information needed to fulfill the strategies under each pillar of the National Marine Policy.

Interoperability – Process and state of relationship by which agencies, units, or sectors interact with each other around shared responsibilities to realize one or more marine policy objectives.

Knowledge – All education and information-related activities or programs with respect to marine and ocean affairs and environment.

Leadership – Top level unit or group of individuals, or individuals in an agency, institution, or organization and the ability to perform the activities based on targets or goals.

Marine – Anything relating to or found in the sea. This is the term used most commonly in the document to refer to ocean activities. This term was chosen over maritime as it was felt to be more inclusive of all ocean activities and objects.

Maritime – Subjects, topics, or activities connected with the sea, especially in relation to seaborne trade or naval matters.

Marine Security – State wherein the country’s marine assets (natural resources), marine practices, territorial integrity, coastal peace and order, and human security are ensured and protected, conserved, and enhanced from all threats, internal or external.

Pillars – The four core areas of marine and maritime governance in the Philippines as reflected in the National Marine Policy 1994 and which is also the framework adopted in this review. The four pillars are: Politics and Jurisdiction, Area Development and Conservation, Marine Security, and Area Regulation and Enforcement. While these core pillars originate from the 1994 NMP, a fifth crosscutting pillar was added. While not part of the original core, this pillar is equally important in its weighting for the overall policy outcomes.

Politics and Jurisdiction – The geopolitical realm of the policy. They refer mostly to the territorial claims, scope, and boundaries thus far defined, or claims laid on oceans, high seas, and marine resources as also defined by policies, laws, codes, treaties, or agreements.

Resources – All material, financial, and natural assets that exist or are needed to increase or enhance wealth, development, or goals.

Sustainable development – “Development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Our Common Future 1987 in World Bank 2001, 2).

Methodology

As an area of study, the 2015-16 review of the 1994 NMP poses a multitude of challenges. There is an inherent difficulty in reviewing a national policy for a country made up of more than 7,500 islands and over 100 million people, including indigenous groups within a realm of ever changing science, economics, politics, and society. While challenges are inevitable with any research, it is still a critical task to undertake. There is no singular expertise or discipline that can best be used in such a comprehensive study, and only an interdisciplinary approach and perspective can do justice to the review. Having recognized this, a pool of experts from diverse fields of study, such as marine science, law, public administration and governance, economics, engineering, foreign policy, and fisheries, was formed under UPCIDS.

While a quantitative method may ensure a comprehensive and inclusive policy that reflects on-the-ground realities of the Philippine marine environment and economy within the current geopolitical context, the relatively short period of time for the study makes this endeavor challenging. The primary method used by this study is qualitative, and the perspective of the local population it involves is also considered. The strength of a qualitative study is its ability to provide in-depth descriptions of how people experience a given issue, in this case, the national marine issue.

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This study focused on two key qualitative methodologies to ensure a comprehensive analysis of the information available: key informant interviews (KII) and focus group discussions (FGD). The FGDs and KIIs were conducted in Zambales, Cebu, Palawan, Davao, Batanes, and Zamboanga. The key informants were chosen through purposive sampling based on their areas of expertise and their familiarity with national and local concerns.

Including a literature review surrounding the global and local marine paradigm, these methods ensure a rounded perspective of multi-level factors to shape the National Marine Strategic Action Plan.

In both FGD and KII methods of data generation, ethical consideration is important. For example, an ethical guideline sheet and PowerPoint presentation were prepared. Participants were also fully aware of what their role included, and had no illusions of receiving payment of any kind. Participants were all informed that they could withdraw any information at any point in the study prior to publication.

In some instances, such as in Batanes, the FGD gave the researchers the opportunity to see and experience activities related to local marine practices. These included visiting the boat shelters and well-maintained lighthouses, among other things that many other ports in the country could adopt.

Data generated from all methods, namely, FGD, KII, practical observations, and all documents and literature accessed by the research team, were framed around the identified four pillars adopted by the review to form the bases for the insights and analysis in this study.

Key Informant Interviews (KII)⁸

Semi-structured and in-depth interviews with experts⁹ within the identified framework, as well as key stakeholders, were conducted. The researchers engaged with the interviewees by posing questions in a neutral manner, listening attentively to participants' responses, and asking follow-up questions and probing based on those responses. They did not lead participants according to any preconceived notions, nor did they encourage participants to provide particular answers by expressing approval or disapproval of what they said. In-depth interviews were usually conducted face-to-face and were normally one-on-one, but a few were with additional participants. All KIIs were documented with notes as well as recordings, and summarized into tables. The analyses of these interviews were used in grouping crosscutting themes into narrative form within this paper. See Appendix 4 for the list of key informants who were interviewed.

⁸ For the complete list of key informants, refer to Appendix 4.

⁹ For the complete profile of the experts, see Appendix 7.

Focus Group Discussion (FGD)¹⁰

In this study, focus group discussions allowed for a reflective sample. Utilizing voluntary participation within coastal areas across the country allowed diverse sectors of society to participate. The study conducted ten FGDs held in the following areas: Subic, Zambales, Cebu, Palawan, Davao, Zamboanga, and Batanes. These areas are along the strategic points within the country's six marine biogeographic regions.

An average of 13 participants attended each three- to four-hour discussion session. In the FGD, a moderator led the discussion by asking participants to respond to open-ended questions which required an in-depth response rather than a single phrase or a simple "yes" or "no." In the course of the discussion, one response affirmed, validated, or challenged another response, and turned the discussion into an engaging and incisive analysis on a given issue in NMP. A researcher documented the discussion by taking detailed notes.

A principal advantage of FGDs is that they yield a large amount of information over a relatively short period of time. The FGDs were effective for accessing a broad range of views on a specific topic, as opposed to achieving a group consensus. In some cases, the FGDs were followed by a one-on-one interviews which allowed for further insights on topics.

To ensure clear understanding and to keep the conversation on topic, the use of a PowerPoint presentation with the questions on screen was used (the questions are found in Appendix C). This gave everyone time to reflect on the questions and refer back to them time and again. In addition, the PowerPoint presentation was given in Filipino and English in conjunction to ensure nothing was lost in translation and there was freedom in the choice of language. Notes from the FGDs were then disseminated and key and recurring themes were extrapolated from the notes.

Scope and Limitations

The project covers a review of the National Marine Policy (NMP) 1994 and the formulation of the National Marine Strategic Action Plan.¹¹ However, during a scoping workshop held in September 25, 2015, some of the representatives of the national government agencies were not fully aware of the existence of an NMP 1994, much less of its core content.

This review focuses on the four pillars of the NMP 1994: Politics and Jurisdiction, Area Development and Conservation, Marine Security, and Area

¹⁰ For the complete details on the Focus Group Discussion, see Appendix 3.

¹¹ In the Memorandum and Agreement signed between UP and NCWC, the project purpose states: "Review and Updating of the National Marine Policy of 1994 and Formulation of National Maritime Strategy."

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Regulation and Enforcement. This study finds the four pillars comprehensive and adequate to cover the core concerns in marine development, including the various dimensions of its governance. The four pillars enable a framework that is developmental in perspective and that brings in the marine science, economic, institutional, political, and human security dimensions to achieve a balanced and sustainable society.

While the review examines and shows the links among these dimensions of marine governance, the study also recognizes the context of an environment that is challenged by climate change and the demands for a resilient society. In working out the broad strokes of a plan on marine policy, the study focuses on the key inputs or requirements that are necessary for an integrative and development-framed strategy. The plan identifies how the issues and concerns in each of the four pillars could be addressed and enhanced to achieve a sustainable society.

The plan barely touches on its implications to relations with neighboring ASEAN countries around shared marine concerns. The plan does not recommend specific activities, nor does it suggest particular costs and detailed financial or technical requirements. Some general policies or policy directions are identified and suggested.

This review only focuses on the Philippine marine environment in relation to the 1994 NMP. Therefore, it only covers issues, challenges, and strategies that directly fall under the aforementioned pillars of the policy.