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Ocean governance in the developing countries : a comparative analysis of Fiji and the Philippines

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OCEAN GOVERNANCE IN THE DEVELOPING COUNTRIES:

A COMPARATIVE ANALYSIS OF FIJI AND THE PHILIPPINES

By

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DECLARATION

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

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

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ABSTRACT

Title of Dissertation: **Ocean Governance in the Developing Countries: A Comparative Analysis of Fiji and the Philippines**

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This dissertation assesses the development and trend of ocean governance in the developing countries by comparing the settings in Fiji and the Philippines.

The study is determined to look into the prevailing issues affecting the development of ocean law and policy and the constraints in the existing institutional structures and governance strategies that eventually impede effective ocean governance of the developing countries.

A brief discussion of the historical development of ocean governance from the global perspective is included as well as the role of the developing states leading to the realization of a governing legal regime for the oceans and their resources.

The third and fourth chapters present comprehensively the marine indicators, ocean use sectors, ocean management perspectives, and issues prevailing in the developing coastal States of Fiji and the Philippines, respectively.

In examining the problems affecting ocean governance of the two focussed countries, the author has analyzed them based on their legal, political, institutional, and capacity building systems.

The author concludes that the trend in ocean governance in the developing countries, based on the perspectives illustrated by Fiji and the Philippines is still way below the ideals set at the international level. Both countries are still addressing the ocean issues at the sectoral level rather than the integrated approach and they are still at the stage of learning how to harness the marine potentials within their jurisdiction. As policy recommendations, the author proposes among others, the following:

1. Enactment of a National Oceans Law that consolidates all existing law and policies relating to ocean management and includes the reorganization of all agencies with mandates linked to ocean affairs under a separate Ministry; and

2. Formulate a national ocean policy that integrates all existing and potential uses of ocean space and marine resources.

KEYWORDS: Ocean governance, ocean management, ocean policy, developing countries, Asia-Pacific, Fiji, Philippines, comparative analysis.

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LIST OF ABBREVIATIONS

ADB	Asian Development Bank
AFP	Armed Forces of the Philippines
BFAR	Philippine Bureau of Fisheries and Aquatic Resources
CABCOM-MOA	Philippine Cabinet Committee on Maritime and Ocean Affairs
CBD	Convention on Biological Diversity
CEG-MO	Center for Environmental Geomatics - Manila Observatory
CRMP	Coastal Resource Management Project
CROP	Council of Regional Organizations in the Pacific
DENR	Philippine Department of Environment and Natural Resources
DND	Philippine Department of National Defense
DOE	Philippine Department of Energy
EEZ	Exclusive Economic Zone
EIA	Environmental Impact Assessment
FAO	Food and Agricultural Organization
FFA	Forum Fisheries Agency
GDP	Gross Development Product
ICOM	Integrated Coastal and Ocean Management
ILC	UN International Law Commission
IMB-PRC	International Maritime Bureau – Piracy Reporting Centre
IOI	International Ocean Institute
IWCO	Independent World Commission on the Oceans
MACC	Fiji Maritime Affairs Coordination Committee
MARINA	Philippine Maritime Industry Authority
MPA	Marine Protected Area
MWSG	Marine Sector Working Group
NIEO	New International Economic Order
NMP	Philippine National Marine Policy
PCG	Philippine Coast Guard

PCSD	Philippine Council for Sustainable Development
PEMSEA	Regional Program on Partnerships in Environmental Management for the Seas of East Asia
PIROF	Pacific Islands Regional Oceans Forum
PIROP	Pacific Islands Regional Ocean Policy
POP	Persistent Organic Pollutants
PPA	Philippine Ports Authority
RFMF	Republic of Fiji Military Force
RP	Republic of the Philippines
SDB	Sustainable Development Bill
SIDS	Small Island Developing States
SOPAC	South Pacific Applied Geosciences Commission
SPC	South Pacific Commission
SPOCC	South Pacific Organizations Co-ordinating Committee
SPREP	South Pacific Regional Environment Programme
UNCED	UN Conference on Environment and Development
UNCLOS	UN Convention on the Law of the Sea
UNDESA	UN Department of Economic and Social Affairs
UN-DOALOS	UN Division for Ocean Affairs and the Law of the Sea
UNDP	United Nations Development Program
UNEP	UN Environment Programme
UNESCAP	UN Economic and Social Committee for Asia and the Pacific
UNFIP	UN Fund for International Partnerships
UP	University of the Philippines
USAID	United States Agency for International Development
USP	University of the South Pacific
WWF	World Wide Fund for Nature

1. INTRODUCTION

"Our ignorance of the ocean is profound, although we have learned much during the last hundred years, our knowledge of ocean processes and life in the oceans will remain forever incomplete."

Mann Borgese, E. (1998, p. 23)

1.1 Overview of the study

According to the environmental group called SeaWeb, "perhaps more than in any other region, the local communities in Asia and the Pacific Islands rely on their rich marine resources for daily sustenance, economic development and traditions" (http://www.seaweb.org/). Moreover, in a published report of the United Nations Environment Programme entitled "Asia-Pacific Environment Outlook 2," the region is facing immense problems caused by "high population density and growth, rapid industrialization and urbanization, and widespread poverty" (UNEP, 2001). Apparently, the report added that the consequences are evident in the depletion of the region's coastal and marine resources. Subsequent special commissions convened by the United Nations, namely the World Commission on Environment and Development (Brundtland, 1987) and the Independent World Commission on the Oceans (IWCO, 1998), both cited that indeed the widespread poverty and widening resource gap between the developed and the developing countries are the major problems affecting directly the continuing environmental degradation.

Fiji islands and the Philippines are developing countries (Human Development Report[1], 2006) situated in the Asia-Pacific region. Both have extensive interests in coastal and ocean affairs as indicated by their physical, political, and marine

[1] The basis is the Human Development Index, where a developing country is rated from moderate to low.

economic geographies. Moreover, historically the two nations also share commonalities in seafaring and customary marine management traditions.

The Philippines is an archipelagic State while Fiji enabled legislation both for archipelagic and straight baselines considering their complex topographic conditions. However, both states have enormous responsibilities associated with their wide ocean spaces under their jurisdiction and even extended them in the 1970s when they declared their respective 200-mile exclusive economic zones.

Through the years, a portfolio of international and regional environmental treaties and conventions and non-binding agreements were enacted at the international community level to address particular environmental concerns. After 13 years since the 1982 United Nations Convention on the Law of the Sea entered to force in 1994, it is noteworthy to look into the trend of ocean governance in the developing countries.

1.2 Research objectives

The primary purpose of this dissertation is to examine and analyze the ocean governance efforts of two developing countries – the Republic of Fiji Islands and the Philippines. The author strongly believes that in understanding the concept of ocean governance, it is better to learn by understanding the situation in the developing countries through comparative cross-national analyses. In addition, the appreciation of the origins and development of ocean management, law and policy and the implementation by States, are also critical in understanding the broader picture of ocean governance. In order to accomplish these, this paper examines the national efforts made mainly in terms of their ocean policies, legislations, institutional framework and mechanisms, and State practices and other responses to the triggers for ocean governance. The study further considers to a wider extent the significant aspects affecting the ocean governance initiatives of both developing countries by presenting among others, their respective geographical, socio-economic, and political aspects and related issues.

1.3 Key terms and related literatures

There is a variety of definitions provided by a roster of renowned authors about the concept of ocean governance. However, this study considers the definition of Aguilos (1998, p. 73) that it is "the process of optimizing for present and future generations benefits from the resources in the coastal and marine areas through a set of laws, rules, customs, and organizational and management strategies."

Azfar Bin Mohamad Mustafar undertook a prior study on ocean governance in 2001. However, the paper emphasized the various established "set of sectoral institutions" or organizations affecting ocean governance from the international level of operation (2001, p. 24). In the course of literature reviews, studies on ocean governance and ocean policies concentrated on the global trends and that of the developed nations such as the USA, Canada, Australia, Japan, and European States. Hence, the direction of this study is not directly linked to any particular research. This study, although initially look into the global development of ocean governance eventually narrows its perspective by looking at the level of the selected countries but does not downplay the need to mention the roles of the other sectoral institutions.

In the area of terminologies associated with ocean governance, Jean-Pierre Lévy of the Division for Ocean Affairs and the Law of the Sea has published articles on it. Lévy has emphasized the need to distinguish the concepts associated with coastal area management and ocean management. The "coastal area management focuses on the maintenance of the functional integrity of complex coastal resource systems," while ocean management is sometimes referred to as "sea use management" and it involves a much wider area than the limited band of water and land defined as coastal area" (Lévy, 1993, pp. 76-77).

The term ocean policy is an important ingredient directly associated with ocean governance and Batongbacal (1998, p. 19) defines it as "a framework of decisions that represents a plan for achieving integrated management of marine resources and ocean space, with a view to avoiding or minimizing conflicts and competing

uses of the ocean, and protecting the long-term values and benefits presented by the extension of marine areas under national jurisdiction."

Ocean governance requires among others a national institutional structure. In addition, this "consists of government and non-government organizations with defined roles and responsibilities for planning and implementing ocean sector programs and plans and mechanisms for coordination among those organizational units" (Garcia, 2005, p. 8). However, in looking at a national perspective other vital aspects on legal, political, and capacity building will also be considered.

1.4 Approach and methodology

The major constraint involved in the research is the inability to conduct an actual research activity on the two focused countries. In view of this, the general approach undertaken in data gathering is as follows:

a. Holding limited discussions, mainly through the internet, with some renowned authors who have written articles on ocean governance from Fiji and the Philippines and personal interviews with fellow WMU students from Fiji and the Philippines.

b. Literary review of articles on ocean management and governance from published and unpublished sources, such as standard texts and online articles from technical, professional, and academic journals. The extensive online articles of the library of the University of South Pacific in Fiji were a valuable source of information. Moreover, the World Maritime University library system and its resources provided the bulk of the references, utilizing its resource network link with other libraries in Sweden, such as the Lund and Stockholm Universities.

The method used in the study is the analytical narrative based on synoptic scanning of the focused countries' information relating to their respective marine geography, ocean use sectors, ocean management and maritime law and policies. It is the

intention of this study to come up with a comparative empirical analysis on the aspects affecting the development coastal States' ocean law, policy, and governance directions. To ensure objectivity on the analysis of issues, a great deal of country and case studies and literature are taken into consideration.

This paper focuses on three major questions relative to the ocean governance efforts of both countries: What are the issues affecting the development of ocean law and policy? What are the constraints in their institutional arrangements and mechanisms in the field of ocean governance? Are there any identifiable deficiencies in their current ocean governance strategies?

1.5 Outline of the study

The study is composed of six chapters. Following the introductory chapter, Chapter Two of the dissertation deals with the evolution of global ocean governance, then the events leading to the emergence of the new international marine economic order, and the awareness of the environmental issues from the point of view of the developing nations.

Chapters Three and Four describe the ocean management situation in the two developing countries – beginning with Fiji and followed by the Philippines. The chapters emphasize every essential element affecting the ocean management and governance of each country.

Chapter Five shifts into the comparative analysis of issues affecting the ocean use management and governance strategies of both countries at the national level. The analysis focuses on the concept by Annick de Marffy on her paper entitled "Ocean governance: A process in the right direction for the effective management of the oceans," where four pillars need to be satisfied by the States in their pursuit toward effective governance - legal, political, institutional, and capacity building. Finally, Chapter Six presents the conclusions and recommendations.

2. OCEAN GOVERNANCE AND THE DEVELOPING COUNTRIES

"If people are to exercise their responsibilities for the prudent management and use of the oceans, they must possess the requisite knowledge as well as opportunities for influencing decision-making on the oceans."

Independent World Commission on the Oceans,
"The Ocean Our Future" (1998, p.116)

This chapter focuses on the stages in world development, the changing patterns of sea uses, and the perceptions surrounding the ocean space and its resources and environmental issues leading to the concept of ocean governance. Moreover, the discussion also presents the contribution of the developing countries in the development of the ocean management concepts. However, considering the expanse of available literatures, this chapter will not mention the accounts and assertions made on the early uses of the seas and its resources articulated by Hugo Grotius, Bynkershoek, John Selden, Christian Wolff, Vattel, and other prominent scholars, although they themselves were also instrumental in shaping the development of ocean governance.

2.1 Evolution of ocean governance

2.1.1 Early beginnings until the early post-modern society

Ocean governance traces its beginnings in the early stages of the modern society during the late eighteenth century and this is the period marked, *inter alia,* with the

beginning of the rise in prominence of the Atlantic Ocean, the opening of the Suez Canal, and the early introduction of navigational charts (Vallega, 2001). The role performed by the Atlantic Ocean is crucial for it is the set-off area for the steamships of the maritime States. The steamship voyages were primarily for exploration and mapping activities and in search of economically and politically important ocean areas and sea routes. Moreover, the Atlantic Ocean was also bustling then with fishery activities.

Leading into the nineteenth century, the era ushered the technological advancements in the field of oceanographic research and this contributed significantly to further expansions in mercantile activities. The aggressive pursuit of advancement in scientific studies of the oceans is also a prevalent activity. The various scientific activities also include the development of the technology for finding rich areas for ocean living resources. The strategic importance of the oceans continued when newly introduced technologies enhanced the sea atlases hence, seeing significant improvement in navigation for the maritime nations and more fishery explorations for the fishing nations.

The decades of the 1950s and 1960s are the periods where the world communities started to perceive the necessity for caring for the oceans and conserving its living resources. However, as Oda (1989) points out, the countries found themselves in a precarious situation since any initiative for its conservation directly affects the equally basic need to allocate the dwindling marine resources.

Juda (1996) revealed that in the early twentieth century when the world was addressing the problem of depleting fisheries resources, marine pollution concerns are also rising in prominence. This was a collateral result of the transition phase from coal-fired steam power ships to oil as fuels. The perceived threats from oil-powered ships added to the rising growth in carriage of oil by ships and so with the risk of oil spills to the marine environment. Table 2.1 shows the tremendous increase in the number of ships from 1914-1925, while Table 2.2 presents the trend of tanker fleet from 1900 until 1936 (Juda, 1996, p. 57).

Table 2.1: World fleet of oil-powered ships over 500 gross registered tons
Source: Preliminary Conference on Oil Pollution of Navigable Waters, Washington, June 8-16, 1926

Year	*Number of vessels*	*Gross registered tonnage*
1914	501	1,721,747
1920	2,021	9,039,247
1925	3,822	19,372,615

Table 2.2: World fleet of tankers over 500 gross registered tons
Source: US Department of Commerce, Merchant Marine Statistics 1936

Year	*Number of vessels*	*Gross registered tonnage*
1900	182	424,589
1914	356	1,441,196
1920	673	3,008,130
1930	1,542	7,753,059
1936	1,735	10,053,720

After the Second World War, the "coastal states initiated a series of unilateral extensions of jurisdictions to reduce pressure on natural resources and secure for themselves a greater share of the wealth of the oceans" (Institutional Dimensions of Global Environmental Change, 2000, p.1). This prompted the League of Nations to recommend the formulation of a legal regime governing the seas with the task of drafting given to the UN International Law Commission (Anand, 1983). The ILC considered all relevant treaties, customs, and international judicial decisions in its codification process and the drafts were presented in the 1958 Conference leading to the adoption of the conventions on the territorial sea and contiguous zone, high seas, fishing and living resources and the continental shelf. However, in the said conference the question left unanswered is the breadth of the territorial sea hence the subsequent conference in 1960. Nonetheless, the 1960 Conference also failed to resolve the matter and exhibited to the world the internal dissension and irreconcilable differences between States relative to the offshore jurisdictional claims and the ocean space management (Churchill and Lowe, 1999, pp. 15-16; Juda, 1996, pp. 170-208).

In the 1970s, the scale of sea uses further increased with the introduction of important technological breakthroughs. The ocean areas became busy with the laying of telephone cables, installation of pipelines, mineral exploitations, oceanographic research, and undersea archaeology, to name a few (Vallega, 2001, pp. 6-7). The continuing challenges posed to the oceans brought about by triggering factors are also shown in Table 2.3 through the various phases.

Table 2.3: The stage-based model (Vallega, 2001, p. 3)

Societies	***Phases***	***Duration***	***Triggering Factors***
Modern	**Take-off**	**1760s - 1880s**	**First Industrial Revolution**
	Maturity	**1880s – 1970s**	**Second Industrial Revolution**
Post-modern	**Take-off**	**1970s – 1990s**	**Development and environment**
	Maturity	**1990s and beyond**	**Globalisation**

The latter part of the modern society until the early part of the post-modern society is characterized by the realization of the consequences of the technological developments and the call for a renewed approach to sea uses and ocean management. The period saw the intense discussions on the environment from the pioneers of the International Ocean Institute (IOI) through the *Pacem in Maribus* and in the continuing UN conferences on environment-development linkages.

Cicin-Sain and Knecht (1998, p. 72) have manifested the fact that prior to the 1970s "environmental efforts at the international level were generally fragmented and reactive and tended to deal with relatively narrow problems or issues." It was these rising concerns coupled with the need for a proactive approach that pushed the UN to hold the first conference on environment and development in Stockholm, Sweden in 1972. Relatively, the UN approach bore significant effects that also led to subsequent international legislations particularly the 1973/78 MARPOL Convention. Moreover, following the establishment of UNEP during the Stockholm Conference, it immediately embarked on the establishment of the Regional Seas Programme. The

programme highlighted the enclosing of adjacent sea areas around the world and having a particular action plan for each grouping (Haas, 1990). While the international community is preoccupied with environment-development concerns, there is also a parallel study conducted by the World Society for Ekistics (WSE)[2] through a symposium in 1965 on the increasing urbanization of the world known as the "ecumenopolis" concept (http://www.ekistics.org/). The idea behind the research is, assuming the world survives a total collapse leading to barbarism, the world's population is expected to reach 30 billion in the twenty-first century and will lead to irreversible infringement of the coastal and island areas (as cited in Stewart, 1970). Likewise, on the economists' side the increasing pressure brought by continual development as well as rapidly growing population would result to increasing demand for food, energy, and raw materials (Cruickshank, 1998).

Due to the growing social perception and pressure, the need to institute ocean governance intensified and as Vallega (2001, p. 60) explained, "the interaction between law, governance…have become fundamental features of post-modern society's approach to the ocean" (Fig. 2.1).

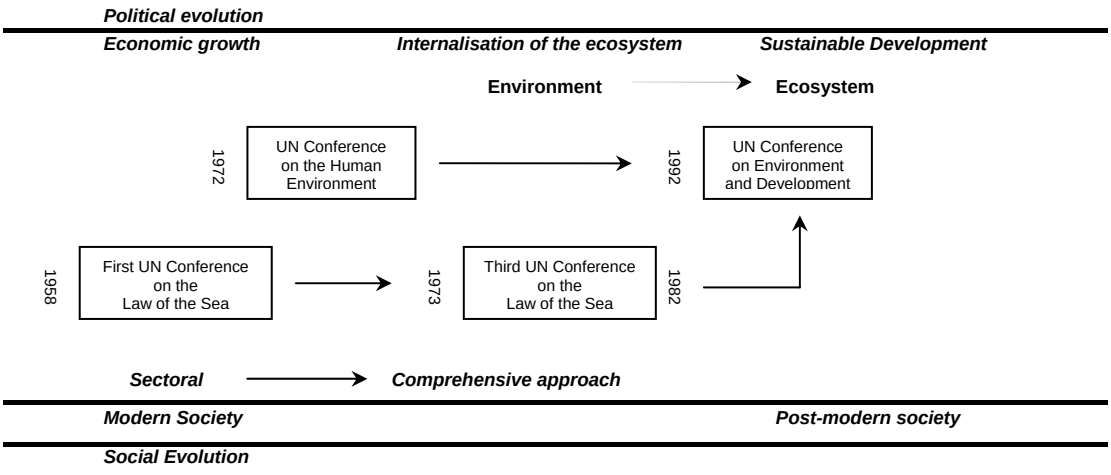

Figure 2.1: The political path followed by the main UN conferences
Source: Vallega (2001, p. 61)

[2] The World Society of Ekistics (WSE) is an organization dealing with *ekistics*, the science on the study of human settlements.

2.1.2 Post-modern society and beyond

Twenty years after the first global environment conference in Stockholm, the UN Conference on Environment and Development or otherwise known as the 1992 Earth Summit was held in Rio de Janeiro, Brazil. The summit led to the adoption of three major agreements – the Agenda 21, Rio Declaration on Environment and Development, and the Statement of Forest Principles; and two key conventions - the Convention on Biological Diversity and the UN Framework Convention on Climate Change (UN, 1997).

The Convention on Biological Diversity (CBD) is argued as resulting from the heightened concern on the world's biological diversity with the widespread lose of important species and ecosystems as a result of continued environmental destruction. The CBD entered into force at the end of 1993 and regarded as the first global agreement with the primary goals of conservation and sustainable use of biological diversity and fair and equitable sharing of the benefits from the use of genetic resources (Secretariat of the CBD, 2000, pp. 5-14).

The UN Framework Convention on Climate Change (UNFCC) addressed the need for advance intergovernmental efforts in tackling the challenges posed by climate change through sharing information on best practices, launching national strategies, and inter-governmental cooperation (UN, 1992b).

The Agenda 21 (UN, 2005) and the Rio Declaration (UN, 1992c) enumerated the recommended "key policies for achieving sustainable development while at the same time addressing the needs of the poor and recognizing the limits of development to meet global needs" (Gardiner, 2002, p. 1). Both instruments are soft laws or nonbinding documents in the light of international law.

The Earth Summit embodies a comprehensive set of major international environmental laws that are *para droit in* nature, thus subject to the satisfaction to implement and enforce or not at all by the contracting States. However, it has greatly influenced the subsequent UN conferences where environmentally sustainable development is matched against various State priorities. Moreover, a lot

of countries have positively responded through the enactment of national initiatives following the principles and action plan as presented in the said instruments and hopefully become binding in the long run as a customary international law (Caldwell, 1990; Cicin-Sain and Knecht, 1998; Gardiner, 2002).

Since then it was widely observed that subsequent UN conferences on environment and development followed closely the paradigm shift emanating from the Earth Summit. Succeeding conferences instituted for strategic time-bound goals emanating from the 1992 Earth Summit principles geared on monitoring the progress of initiatives undertaken by various States.

2.2 The legal framework of ocean governance

The recommendations and fundamental principles laid out through the series of UN conferences from 1973 to 1982 UNCLOS and then the 1992 United Nations Conference on Environment and Development (UNCED) became the backbone of ocean governance in the post-modern ocean society. The 1982 UNCLOS enable the States to draw reference from its three main features – "first is the 320 articles which is a summary of the legal frameworks based from the 1958 and 1966 conferences; second is the definition of national and international jurisdictional limits; and third, is the provisions on environmental protection and ocean research" (Vallega, 2001, pp. 60-62). The 1992 UNCED provided the guiding principles and action plans in addressing environment and development issues through the "central concepts of interdependence, integrated management, and sustainable development" (Cicin-Sain and Knecht, 1998, p. 81).

2.3 Ocean management pattern

Ocean governance covers the whole spectrum of the marine environment. Chapter 17 of Agenda 21 provides that the marine environment refer not only to a specific area of the seas and oceans but the complete ocean spectrum including the littoral region around them (UN, 2004). As such, the applicable provisions of 1982

UNCLOS should be treated as complementary in the acquiescence of the Agenda 21 guidelines. Relative to the application of Agenda 21, the 1982 UNCLOS provisions is considered as the legal basis under international law for the reason that aside from defining the marine jurisdictional boundaries, it sets forth the rights and obligations to pursue the protection of the marine environment resources and their sustainable development. Hence, the spheres of influence of ocean governance cover the coastal areas, deep ocean, and even applicable in the concept of regional seas.

2.4 New international economic order (NIEO)

The various phases in the development of the world and the States were attributed largely to the technological revolution initiated by the world powers of Europe, the United States, and Japan. The world powers were able to roam the seven seas, basked on their freedom of navigation, and at the same time colonize newly discovered land areas. In addition, they had enjoyed the power to partake the bounties of their colonies. However, after two world wars the privilege of the then system of international order inevitably led to its downfall. The inhabitants of the colonies learned and realized the potential of their own existence as well as the resources of their territories. They learned to fight for their own freedom to obtain the sovereignty over their resources and eventually conspired to rebuild their lands on their newly learned as well as inherent potentials (Evensen, 1980) hence, the birth of the new international economic order (NIEO).

The 1945 unilateral extension of the United States jurisdiction over its natural resources on the continental shelf triggered the awareness of the developing economies to follow suit by also asserting their sovereign rights over their potential seabed resources. The Latin American countries of Chile, Ecuador, and Peru, having gained their independence in the late 1940s to early 1950s and realizing the threat of overfishing by distant fishing nations asserted their rights over a 200-mile zone. In the Middle East, some of them also grabbed the chance to extend their traditional 3-nautical mile territorial sea up to 12 nautical miles. In the same manner,

the archipelagic countries such as Indonesia and Philippines also claimed their rights over their vast surrounding waters (UN, 1998).

In November 1967, Ambassador Arvid Pardo of Malta perceiving the potential conflict between the developed States and the developing States over the seabed minerals and the ocean floor made his point in the hallowed halls of the United Nations for the establishment of an "international jurisdiction and control over the sea-bed and the ocean floor" considering that they are "*common heritage of mankind* and should be used and exploited for peaceful purposes and for the exclusive benefit of mankind as a whole" (Pardo, 1967, pp. 2 & 17).

The discovery of manganese nodules on the ocean seabeds is of primary interest for the developing nations. Considering the technological disadvantage of the developed States, the developing countries fought hard on the floor for the right over equal share in the exploration of the minerals. Mann Borgese (1991) described the competition between the developed and the developing as influential in charting the course of UNCLOS. The trend to operate deep-sea mining was pointed out by Vallega (2001, pp. 105-107) as having lost its economic potential due to high costs of exploration activities and the environmental impacts associated with deep sea mining, hence, to the detriment of the developing State's effort and economic possibilities.

Considering the importance of the continental shelf for minerals, oil, and gas, fisheries is of primary concern too for the developing economies. The beginning of the twentieth century showed accelerated increase in fisheries activities (Charles, 1998). Fish catches reached 30 million tonnes a year from the mid-1940s to the early 1960s. Moreover, in the year 2000, the production is approaching 90 million tonnes per year. Observation on the recorded increasing fisheries exploitation coincided with the UN 1992 initiative to formulate sustainable fishing practices applicable to national and international waters (Squires, 1994). Fishing fleets from all over the world were converging on well-stocked biomass areas such as the North Atlantic, North Pacific, marginal seas of the Pacific side of South America. These areas are found within the upwelling zones of the great conveyor belt. During the

period, the establishment of exclusive economic zones (EEZ) and exclusive fishery zones (EFZ) gave significant advantages to the developing countries (Vallega, 2001).

The Stockholm Conference is a prime example of how the developing States retorted when the UN first brought the idea with a theme focussed on the ecological problems. The Third World countries were not content on discussions purely on the ecology concerns but strongly batted for the inclusion of the economic development vis-à-vis the environmental issues. Hence, prompting the "Secretary-general Maurice Strong of the UN Conference on the Human Environment to initiate an expert's panel forum in June of 1971" that led to the Founex report[3] (Juda, 1979, p. 91). The Founex report contained the aspirations of the developing countries that eventually led to a series of meetings and finally the 1972 Stockholm Conference.

The Third UN Conference on the Law of the Sea marked the discussions on designing and adopting global approach to the regime of national seas and territorial waters (Birnie, 1993). In this conference, almost all developing countries agreed in the extension of their national jurisdictional zones, which was initially met with disapprovals of the developed States. The expansion of the bands of waters provided an avenue for the developing countries to explore and exploit the potential ocean resources with implications leading to their economic development (Vallega, 2001). On this note, the developed nations were against the idea, since it will curb the movement of their navies aside from seeing the developing nations rushing to explore the immense seabed resources.

In the end, the developing countries prevailed in their move to provide in UNCLOS the provision for an International Seabed Authority to ensure equitable distribution of deep-ocean resources. The prospects seen by the developing States in wider ocean use management seemed to their advantage, however, the capacity for

[3] Instrumental in laying the bases for the first UN Conference on Environment and Development and the establishment of UNEP. The Founex Report called for an expansion of the entire concept of environment and to link it directly to the economic development process and priorities of developing countries. Full report on: http://www.southcentre.org/publications/conundrum/conundrum-04.htm)

governance particularly on the existing issues and imminent concerns surrounding their wider area of responsibility seemed incomprehensible.

The concept of the New International Economic Order (NIEO) brings to fore the emergence of the new independent and developing States taking part actively in world affairs. Other authors refer to it as the New International Marine Order (Laursen, 1980). The concept is a shift to a "more equitable and cooperative world order" to deal with the burgeoning ocean space issues confronting the world (Pardo, 1978, p. 10) and where the united voices of the developing coastal states are eventually considered in the international community.

NIEO ushered the emergence of the newly independent and developing States. The era is also described as the new international marine order (Laursen, 1980). On the other hand, Michael Morris described it as the new ocean order era spread out in three stages marked conspicuously by the development of Third World marine policies. It started with the "promotion stage" during the early post war period, followed by the "achievement stage," defined by the deliberations of the UN Seabed Committee, and the "policy implementation and integration stage," that is outlined by the UNCLOS III and could be further described as overlapping the first and second stages (Morris, 1998, pp. 69-81). Morris (1998, p. 75) clarified the goal of the first and second phases is geared as being "politico-legal in nature" that culminated in the 1982 UNCLOS while the third stage as "primarily technical," considering the challenge of practically implementing the national marine policies.

The following chapters shift the focus to the two countries, the focal case studies of this study. Chapter 3 considers Fiji, the first Pacific island-State to achieve independence on October 10, 1970 and this was from British rule, while chapter 4 considers the Philippines, which recognized its independence on June 12, 1898 from the Spanish colonial rule, although the United States recognized the country's independence only on July 4, 1946. However, the Philippines sticks to the former date.

2.5 Conclusion

The developments leading to the concept of ocean governance from a global perspective is a very important tool in understanding the processes from the level of the international community. The evolution of the concept facilitates identification along the way of the key events or environmental complexities that shaped the enactment of appropriate legal regimes and the establishment of institutional mechanisms. The bases of the initiatives simply emanate from emerging concerns affecting the economic growth of the nations. In the following chapters, the discussions zoom into the particular country case studies on how they have capitalized from the international treaties and agreements.

3. THE FIJI ISLANDS PERSPECTIVE

Pacific-island States are popular for enabling regional steps in addressing various national issues including those involving environment-development concerns. In understanding the Fiji case study in this chapter, it is significant to consider the important regional mechanisms influencing the policy and decision-making of island-States in general.

3.1 The Pacific regional ocean management

In the 1950s, discussion on the environmental concerns and issues of raised by each Pacific-island State were through a regional conference initiated by the South Pacific Commission (SPC). The SPC created through the 1947 Canberra Agreement by the Governments of Australia, France, the Netherlands, New Zealand, the United Kingdom, and the United States of America was a regional forum aimed to aid the dependent island territories achieves economic and social stability. In 1971, following the independence of the island territories the membership was strengthened (SPC, 1988). Various issues elevated to the SPC includes, *inter alia*, the nuclear testing of the U.S. in the Marshall Islands and France in Mururoa; the incineration of chemical weapons by the U.S. on Johnston Atoll; and over fishing in the Pacific Ocean by distant-water fishing fleets. At first, the discussions focussed on the development of a regional policy on addressing the consequences of the nuclear testing conducted in the Pacific States and its effect on the resources. However, following the persistence for a framework addressing a wider spectrum of environmental issues, the efforts shifted instead to a comprehensive regional environmental framework for Pacific-island States (Pulea, 1993).

In 1971, the South Pacific Commission initiated the conduct of a regional conference on reefs and lagoons. Then there was a special project on nature conservation that saw the designation of an ecological officer to oversee the region in 1974. The work continued when in 1976 the South Pacific Forum[4] linked with the South Pacific Commission for a joint undertaking to tackle a regional environmental management approach.

The pursuit for a coordinated regional approach calls for inputs from the different Pacific-island States. They saw the need to congregate all island-States to present a comprehensive report outlining all aspects affecting their environmental interests. Hence, in March 1982 Cook Islands hosted the Conference on the Human Environment in the South Pacific. In this conference, an agreement led to the establishment of the South Pacific Regional Environment Programme (SPREP). Initially it is an independent entity but still within the umbrella of the South Pacific Commission. Eleven years later, SPREP gained its full and formal legal status necessary to operate as autonomous body and an intergovernmental organization by virtue of an agreement signed in Apia, Western Samoa on 16 June 1993 (Apia, 1993). This entered into force on August 31, 1995 and operates with two main agencies, the SPREP Meeting and the Secretariat. The "SPREP's mandate is to promote cooperation in the Pacific islands region in the form of assistance in the protection and improvement of the environment and to ensure sustainable development for present and future generations" (SPREP, 2003 - 2007).

Following the establishment of SPREP during the 1982 Conference on the Human Environment in the South Pacific, the formulation of the appropriate action plan also followed. Pulea (1993, p. 105) referred to the Action Plan as "the environmental bible of the region." Based on the agreement, the Action Plan has the following specific objectives:

a. coordinating regional activities addressing the environment;

b. monitoring and assessing the state of the environment in the region including the impacts of human activities on the ecosystems of the region and encouraging

[4] A regional body established in August 1971 then in October 2000 it was renamed to Pacific Islands Forum.

development undertaken to be directed towards maintaining or enhancing environmental qualities;

c. promoting and developing programmes, including research programmes, to protect the atmosphere and terrestrial, freshwater, coastal and marine ecosystems and species, while ensuring ecologically sustainable utilization of resources;

d. reducing, through prevention and management, atmospheric, land based, freshwater and marine pollution;

e. strengthening national and regional capabilities and institutional arrangements;

f. increasing and improving training, educational and public awareness activities; and

g. promoting integrated legal, planning and management mechanisms.

The 1990s marked the emergence of significant treaties for the South Pacific in the area of environmental legislation. A number of regional conventions entered into force, such as the Convention on Conservation on Nature in the South Pacific and its two protocols on dumping and on pollution emergencies (the SPREP Convention), the Convention on the Conservation of Nature (Apia Convention), and the South Pacific Nuclear Free Zone Treaty (UN, 2002). The SPREP Convention and its protocols, is a major legal instrument guiding the national governments' environmental protection strategy developed through the integrated approach. However, Pulea (1993, p. 106) lamented the fact that "despite the regional arrangements and international initiatives, marine and coastal problems have not been greatly alleviated in the past ten decades."

The Convention on Conservation on Nature in the South Pacific and its protocols entered into force on August 30, 1990 (Apia Convention, 1976). It is the first regional legal framework on marine environmental protection established and implemented on a wider geographical coverage. Wider in the sense that the defined Convention area covered the high seas enclosed from all sides by the exclusive economic zones (EEZ) of the State-parties. The probable setback is in its implementation, where the States' capability would be a question in terms of their capability to monitoring and to control of the areas. Generally, the initiative is a step

towards influencing the developments in international environmental law governing the high seas (Va' ai, 1993).

3.2 Ocean uses and management in Fiji

3.2.1 Overview

The Republic of Fiji Islands is an archipelagic State situated in the South Pacific or otherwise known as Oceania region (Fig. 3.1). It is one of the States found lying in cluster with other island-States and considered one of the most fragile and vulnerable nations in the world (South and Veitayaki, 2002). In addition, the United Nations Division for Sustainable Development referred to such States as:

> Small Island Developing States (SIDS), including low-lying coastal countries, that share similar sustainable development challenges, including small population, limited resources, remoteness, susceptibility to natural disasters, vulnerability to external shocks, and excessive dependence on international trade. Their growth and development is often further stymied by high transportation and communication costs, disproportionately expensive public administration and infrastructure due to their small size, and little to no opportunity to create economies of scale (UN, 2007).

Fiji is one of the largest archipelagos linked with the Melanesian chain of islands. It is the first Pacific island-State to gain independence in 1970 after being under the British rule since 1947 but still adopted the British-style of political system. The country has a mixed racial configuration comprising of ethnic Fijians, Indians, Europeans, Chinese, and other Pacific islanders. The Ethnic Fijians represent 51% while the Indians are about 44% of the 837,000 total population recorded in 2004 (Asia and Pacific Review, 2006, pp. 1-6).

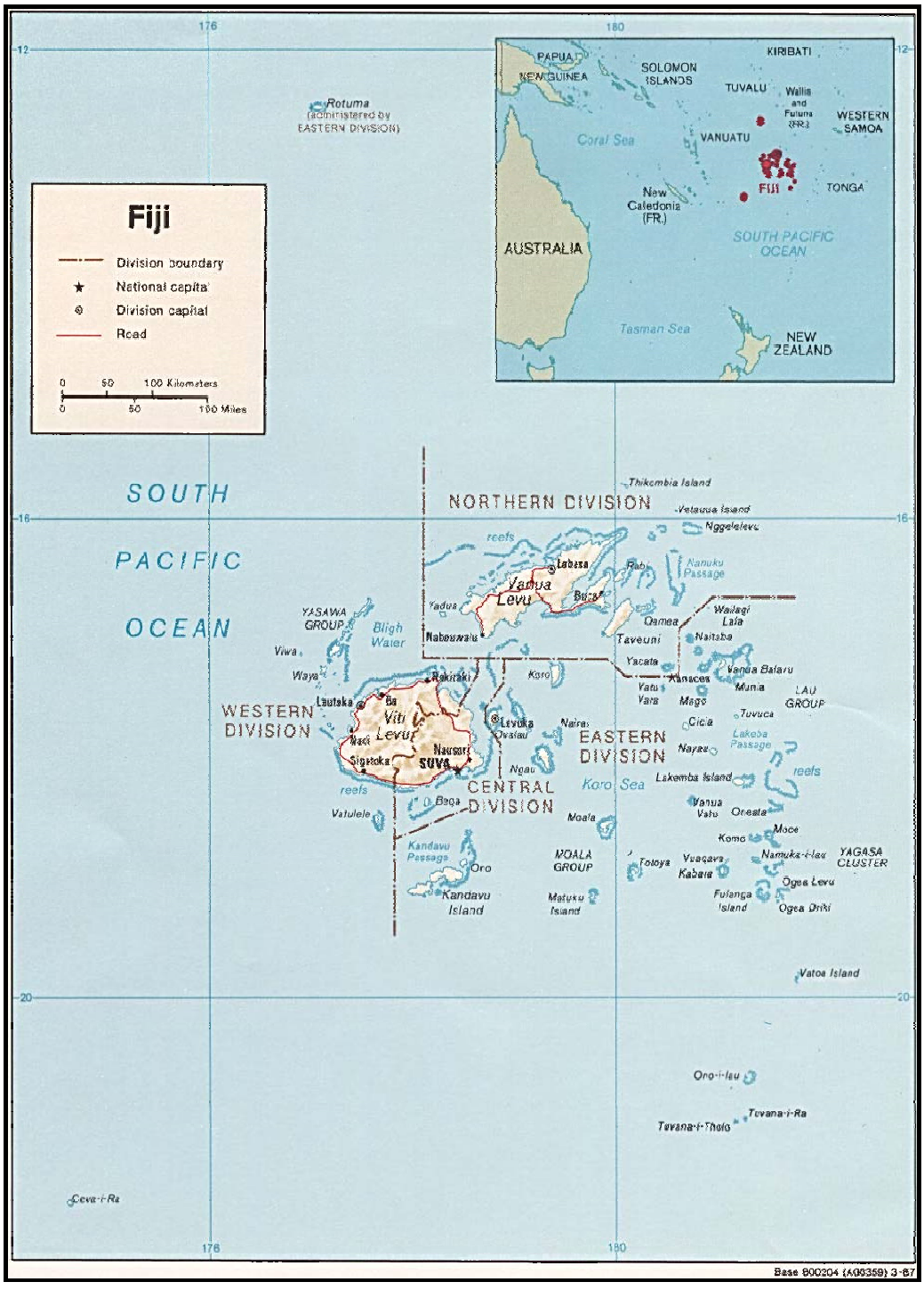

Figure 3.1: Political map of Fiji
Source: http://www.lib.utexas.edu/maps/islands_oceans_poles/fiji.jpg
(Retrieved April 18, 2007)

3.2.2 Physical geography

Fiji consists of an estimated 844 high islands, atolls, and islets stretched between latitudes 15-23 degrees south and longitudes 177-178 degrees west, situated at the mid-point of Tonga Kermadec and New Hebrides, Fiji Basin to its West and the Lau Basin on the East (WWF, 2003a). Most of its islands are primarily volcanic with sedimentary rocks and the inhabited islands are reportedly at around 110 (CIA, 2007). The largest island is *Viti Levu* where Suva the capital, is located. The whole country has a total land area of 18,272 square kilometers. Further, Viti Levu and the island of Vanua Levu cover 87% of its total land mass (Vuki et al., 2000).

Fiji's ocean currents are influenced by the south-easterly swells and for the months of July until December by the easterly swells. Its tidal movements are relatively diurnal and the annual mean tidal range is estimated at 1.1 meters. In general, sea surface temperatures average from 24 degrees to 31 degrees Centigrade (WWF, 2003a).

Cyclones visit the country between the months of October and May. However, not all areas of Fiji are affected since this certain natural hazard is prevalent in the islands such as, the Yasawas, West Viti Levu, Kadavu, Northwest Vanua Levu, Cikobia and the Lau Group (as cited in, Vuki et al., 2000). Since the occurrence of the El Niño and La Niña phenomena, it is a general knowledge that these have scientific relativity to natural disasters. Following the El Niño phenomenon from 1997 to 1998, the United Nations Fund for International Partnerships (UNFIP) supported a study of badly affected countries and Fiji was one of the 16 project areas (UN, undated). Based on the study, dry conditions are felt when El Niño occurs in the late and early parts of the year, while La Niña can cause greater rainfall and raised sea levels.

Relative to the bathymetric data of Fiji, the collection of information is still ongoing under the Hydrographic Section of the Fiji National Marine Department (WWF, 2003b).

3.2.3 Marine political geography

The country's maritime claim is in accordance with the demarcated boundaries set under the Marine Spaces Act Number 18 of 1977, as amended by Act Number 15 of October 1978 (Fiji Government, 1978). The overall topographic setting of Fiji is remarkable considering that it was formed out of "three distinct island groupings" (Broder and Van Dyke, 1982, p.38). The three island groups comprising the country are the Fijian archipelago, the Rotuma Island and its dependencies and the Ceva-i-Ra Island. The Rotuma island group and Ceva-i-Ra Island are separated by approximately 240 miles and 300 miles respectively, off the nearest island of the Fijian archipelago, hence also remote to include them within the EEZ. On this aspect and considering Article 47 of UNCLOS on archipelagic baselines, it would be very difficult to enclose the three groups into one archipelagic baseline (UNCLOS, 1982).

Following the provisions from the Draft Convention of UNCLOS, separate archipelagic baselines were drawn for the Fijian archipelago while the Rotuma Island and eight of its surrounding islands also has its own archipelagic baselines, by virtue of the amendment on the Marine Spaces Act in October 1978. However, in an Order released in 1981 the baselines of Rotuma Island and its surrounding islands were re-drawn as straight baselines (Fiji Government, 1981) and in 1984, the waters around it were declared internal waters (Fiji Government, 1984). "Ceva-i-Ra island also known as Conway Reef, is referred to as Theva-i-Rai island in Marine Spaces Chart 8½" (US Department of State, 1984, p. 2). Based on the Act, Ceva-i-Ra Island also has its own baseline drawn the seaward low-water line of the reef.

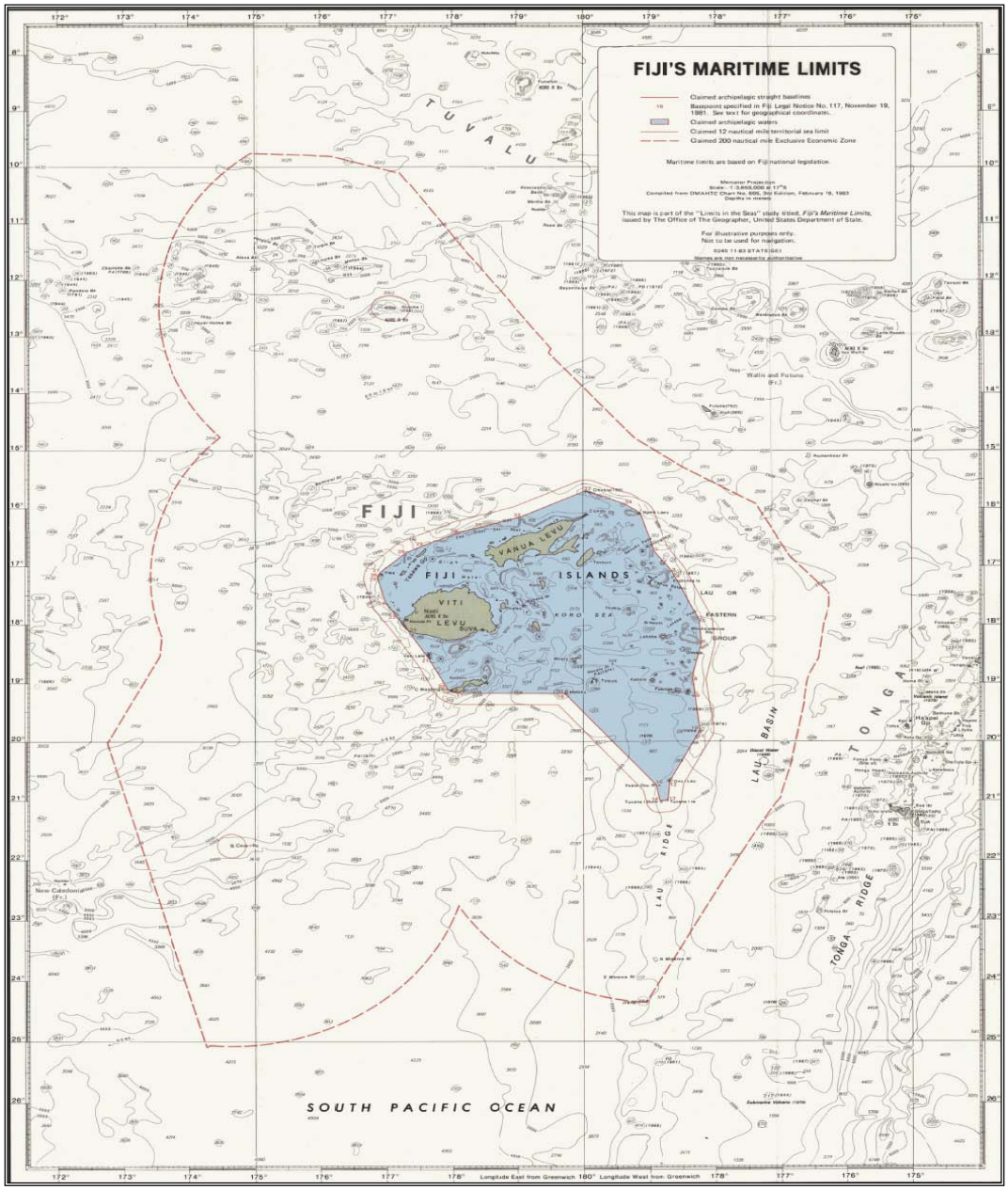

Figure 3.2: Fiji's maritime claims
Source: United States Department of Research, Bureau of Intelligence and Research, Limits in the Seas No. 101 November 30, 1984. www.state.gov/documents/organization/58567.pdf (Retrieved June 18, 2007)

Based on the information posted by the World Research Institute (2000), Fiji has the following claimed ocean areas:

a.	Territorial sea (up to 12 nautical miles)	162,197 km²
b.	Claimed Exclusive Economic Zone (EEZ)	1,055,048 km²
c.	Area of continental shelf	19,497 km²

Although Fiji's maritime limits were demarcated earlier through the Marine Spaces Act still it followed closely the archipelagic doctrine as stipulated in the Draft Convention of the 1982 UN Convention on the Law of the Sea (UNCLOS) and which it is even the first State to ratify (Fig. 3.2). However, in the drawing up of the maritime zones prevailing issues arising out of it are presented in the latter part of this chapter.

3.2.4 Marine economic geography

3.2.4.1 Fisheries

According to Zann and Vuki (2000, p. 165), "Fijians are among the highest seafood consumers in the world, at approximately 40 kilograms per capita per year." The fishing sector of the country is classified into subsistence, coastal commercial and offshore or industrial fishing sub-sectors (http://www.fao.org). The subsistence component refers to the small but important fishing activities largely conducted in the isolated islands. The coastal commercial is fishing activities in the main islands of Viti Levu, Vanua Levu, Mamanuca, and Yasawa groups. And, the industrial fishing mainly concentrates on the tuna industry, where Fiji has existing multilateral treaties with other fishing nations. Food and Agricultural Organization (FAO) estimates generated since 1999 revealed that 50% of rural households are into subsistence fishing mainly for domestic food consumption. Annual landings reached an estimate of about 21,600 tonnes from this sector alone and more than 50% of the country's annual total landings. However, development of the subsistence fishing is hampered mainly due to its inaccessibility to the markets. Accordingly, data obtained by the FAO from the Fiji's Fisheries division reported that 1,012 fishing

vessels and 2,304 fishers engaged in coastal commercial fishing in 1999 and harvested 9,320 tonnes of finfish and non-finfish. Fiji is exporting the products derived from the coastal commercial fishing. Among the essential marine fishery commodities are beche de mar, trochus, aquarium fish, coral, snapper and live food fish. Coastal commercial fishing is also rampant in the lagoon areas of Viti Levu resulting to over-exploitation of commercially important species (FAO, 2000-2007).

According to Nair (2003), Fiji ranks among the top ten countries with a globally significant coral system. This is due to the existence of the Great Sea Reef, locally known as 'Cakaulevu,' in Macuata province of Vanua Levu. The important reef system is habitat to commercially valuable tuna species such as, skipjack, yellow fin, big eye, and albacore. Large quantities of the chilled catch of big eye and yellow fin tunas are exported to fresh fish markets in the United States and Japan. The country's Ministry of Planning (2001) also reported that their canned skipjack, yellow fin and albacore tunas also found their way in the United Kingdom markets. Furthermore, Nair (2003) emphasizes that the fisheries industry constitutes 1.5% of the country's Gross Development Product (GDP) and foresees the potentials of the important industry to undergo expansion in the future (as cited in, Ministry of National Planning, 2001).

3.2.4.2 Seabed resources

According to a World Bank report (undated), there is not enough data providing the potential of the seabed minerals and hydrocarbon deposits in the seabed of Fiji. The document also emphasized that the area around the Lau Group of islands may have significant polymetallic sulphide deposits with high gold content. Alternatively, other than the speculations on the exact seabed potentials of the country, Wu (2001, pp. 13.1-13.14) revealed that the "Metal Mining Agency of Japan (MMAJ) was conducting geologic and geophysical survey and drilling in the Namosi area." The project is part of the Japan Overseas Development Assistance Program (ODA) to the government of Fiji. In addition, it included the conduct of environmental survey to determine a 'geochemical baseline study' around a 4000 square kilometer area in the Viti Levu South region. A local publication catering to the daily updates of South

Pacific States described the project as "… one of the few projects which have started to give us an idea, just an idea, of what could be there." (What's the state of play? 2002).

3.2.4.3 Ports and shipping

Stillman (2004, pp. 250-251) considers the expedition of the Europeans in the Pacific in 1520 as unprecedented for the reason that "Magellan's circumnavigation opened Pacific sea lanes, making possible further European encounters with inhabited Pacific islands lying between Asia and the Pacific." Fiji is a transshipment port of ocean-going ships from the Americas and Asia on their way to New Zealand and Australia. The importance of Fiji as an important transshipment port traces its roots at the time when it was still a British colony and its strategic location in the Central Pacific made it a vital link to the British Commonwealth States of Australia and New Zealand (Stillman, 2004).

The waters around Fiji are important throughways for regional and international shipping. The country has a total of "26 public ports including wharves and jetties and the three (3) main ports in terms of ship calls and cargo volume are Suva, Lautoka, and Levuka" (ADB, 2002, p. 3-11). Aside from a number of public ports, it also has private wharves and jetties operated by industries such as the Fiji Sugar Corporation and Tropik Woods for sugar and wood-chip exports, respectively.

The biggest international entry port is in the capital city of Suva and considered the center for "Pacific regional traffic" aside from being a fishing base and ship repair industries (ADB, 2002, p. 8). The Suva port system consists of the King's Wharf complex, Muaiwalu fishing wharf complex, Narain jetty, and the Rokobili terminal.

The second largest port is in Lautaka and built in 1961, two years earlier than Suva port. Lautaka and Suva ports handle the country's imports and exports as well as the domestic and regional transport of passengers and cargo. The main markets of Fiji's exports are Australia, United Kingdom (UK) and the United States (U.S.A.). Additionally, the said ports also handle imported manufactured goods, foodstuffs,

minerals, fuels, and chemicals from Australia, Japan, and New Zealand. Meanwhile, Lautaka port facilitates the bulk exports, such as sugar products, bottled water for the USA and grass plants for the United Arab Emirates (UAE). Moreover, the port also caters to cruise ships. The third main port is in Levuka, where the tuna cannery is found (ADB, 2002, p. 3).

Considering the geographic configuration of Fiji, shipping is the primary mode of transport. The Department of Government Shipping Services and the Fiji Islands Maritime and Safety Administration are the main agencies tasked to ensure that inter-island shipping services are reliable and operating regularly. The country's regulations governing shipping are embodied in the Marine Act of 1986 and it includes among others the rules for vessel registration and the seafarer affairs. Likewise, in the government's desire to maintain a dependable shipping service particularly to its remote islands, it introduced since 1997 the Shipping Franchise Scheme. Under the said scheme, the government provides subsidies to the private shipping companies to ensure that services are uninterrupted even during the non-passenger season. The program started with a budget allocation of $500,000 and was subject to increase of about $1M in the following year. Aside from funding assistance to shipping services, the government also allocates a significant budget to subsidize new vessel constructions intended for public transportation (Fiji Government, 2005/2006).

3.2.5 Maritime defence and security considerations

The enactment of Republic of Fiji Military Forces Act (Cap. 81) paved the way for the formal creation of the country's armed force in 1949 (Fiji Government, 1949). However, Heathcote (1997, p. 80) points out that the said maritime legislation failed to explicitly mention a naval component. It was only in July 1975 that the Fijian Navy was established following the need for a particular armed force "responsible for border control that includes watching over Fiji's exclusive economic zone and conducting search and rescue missions" (http://en.wikipedia.org/wiki/Military_of_Fiji). Subsequently, Fiji managed to organize a maritime force consisting of three former U.S. Navy minesweepers and Heathcote (1997) even added that Australia also

allocated three patrol vessels under the Pacific Patrol Boat Programme. The Republic of Fiji Military Force (RFMF) has a total of 3,500 personnel, largely composed of infantry and engineers, 300 of which are in the Navy. Today, the Navy's tasks also includes fisheries surveillance, drug interdiction and immigration enforcement patrols.

Langdon (1988) revealed that except for Australia, New Zealand, and Papua New Guinea, the rest of the island States, including Fiji, in the South Pacific really lack the resources to support a potent military force. Generally, Langdon added that most of the South Pacific island States view that the maritime security threats are those posed by the distant fishing fleets taking advantage of the region's important commercial fisheries (as cited in Australia, Senate Standing Committee on Foreign Affairs and Defense, Australia's Defense Co-operation with its Neighbors in the Asian-Pacific Region 1984, p. 27).

3.2.6 Coastal and ocean issues

Based on the study conducted Cicin-Sain and Knecht (1998), the country's main environmental issues are pollution, mangrove deforestation, coral reef loss, and overexploitation of fisheries due to coastal development. What is alarming is the fact that 90% of Fiji's population are living within its coasts. A subsequent study made in 2002 further revealed that more major issues arise largely due to, *inter alia,* the problems resulting from agricultural activities, sewage pollution and industrial effluents, solid waste disposal, soil erosion and again over fishing (Sustainable coastal resource management for Fiji, 2002).

Problems from agricultural activities are attributed to the lack of technological capability to develop other lands such as steep areas and marginal hills for agriculture, thus, contributing instead to the erosion and siltation of the low lying coastal regions (as cited in Ministry of National Planning, 2001). On the other hand, the issue of pollution is widespread in the crowded urban and some rural areas without the proper sewerage system. Conversely, even in areas with installed septic tanks the problem is even worse with overfilled tanks spilling wastes and flowing

toward the creeks. The 2002 paper on “sustainable coastal resource management” also explained that due to inadequate treatment and inappropriate placement of sewage outfalls these further resulted to high-level faecal coliform levels in some areas. The situation is further even made worse by the significant contribution of liquid wastes from the food processing factories, breweries, and paint manufacturers (as cited in Watling and Chape, 1992).

Information obtained from the United Nations Economic and Social Committee for Asia and the Pacific (UNESCAP) exposed that the worst industrial polluter in the country comes from a cement manufacturing plant in Suva. The factory emits large quantities of dust and sulphur dioxide. What made the issue more gruesome is the fact that the raw materials are sourced from coral and sand mining. Hence, aside from harmful health consequences it also damages the nearby ecosystems as well as the marine food chain (UNESCAP, undated).

The Ministry of National Planning (2001) also revealed the continued problem confronting the country on its irresponsible solid waste disposal practice. Refuse dumps are provided but placed near the coasts adjacent to the mangroves. Consequently, large volume of solid wastes is seen floating in the waterways and coastal waters.

Relative to the problem on soil erosion, it was pointed by Leslie and Ratukalou (2001b) that in research conducted in 1998 a significant volume of sedimentation are already observed in the Rewa, Ba, Sigatoka and Nadi watersheds. The quantitative soil loss was measured between 2.2 mm/year (Rewa watershed) to 5.4 mm/year (Nadi watershed).

Moreover, Cicin-Sain and Knecht (1998) have also emphasized the vulnerability of Fiji to the effects of climate change and sea level rise and the most highly vulnerable are the country’s agricultural and coastal and ocean resources. This was evident during the widespread coral bleaching in 2000 because of the El Niño phenomenon (Ministry of National Planning, 2001).

3.2.7 Maritime jurisdictional issues

Fiji's location is geographically close to other South Pacific States. In this particular scenario, overlapping maritime boundaries with a neighbouring State is inevitable. Having this particular issue at the forefront, the South Pacific Applied Geosciences Commission (SOPAC) with the governments of Australia and Taiwan coordinated the conduct of a Regional Maritime Boundaries Project Consultation from 23-26 April 2002 in Nadi, Fiji (SOPAC, 2002). The conference aimed at gathering the Pacific States to present their defined maritime boundaries and to discuss the jurisdictional issues with other concerned States in the region. The agenda also includes the crucial discussion of delimitation of boundaries for those States with overlapping maritime zones.

In the said consultation, the Fiji delegation outlined the status of their maritime boundaries by highlighting their shared boundaries with the States of Tuvalu, France (Wallis and Futuna), Tonga, France (New Caledonia), Vanuatu and Solomon Islands. However, in the statement by Fiji in that meeting, they emphasized the fact that "the delimitation of Fiji's mutual EEZ boundary with her six neighbors is, if the principles laid down in UNCLOS are accepted as a technically straight forward process with two notable exceptions," (SOPAC, 2002, p. 42) and these are:

a. the dispute over the sovereignty of Mathew and Hunter Islands between France (New Caledonia) and Vanuatu; and
b. Tonga's claim to sovereignty over the Minerva Reefs.

Additionally, Fiji is also facing another maritime boundary delimitation concern and that is the existence of "three tri-junction points its boundary" (SOPAC, 2002, p. 42). Lathrop (2005, p. 3305) revealed, "tripoint issues arise in maritime boundary delimitation where the maritime areas of three coastal states converge and overlap." Accordingly, these are:

a. Tripoint 1 – between Fiji, France (Wallis and Futuna) and Tuvalu (agreed in 1990).
b. Tripoint 2 – between Fiji, France (Wallis and Futuna) and Tonga.

c. Tripoint 3 – between Fiji, France (New Caledonia) and Vanuatu

Churchill and Lowe (1999) acknowledged the prevailing uncertainties surrounding overlapping maritime zones that concerned States should endeavour to resolve such hanging issues among themselves jointly with the higher aims of promoting a co-operative ocean development and stability in the region.

3.2.8 Traditional marine management practices

Customary practices play a role in shaping the management pattern in dealing with the resources of a particular society. Gracie Fong points out that a series of studies revealed that the Oceania is historically laden with various forms of customary marine tenure systems (as cited in Hviding & Ruddle, 1991; Ruddle, 1988). However, in other parts of the world such as Asia and South America and other fishing nations, such kind of systems are also found (Fong, 1994; Johannes, 1982) but Hviding and Ruddle (1991) argue that the Pacific region provides significant contributions on this aspect worldwide.

In Fiji, the most significant early practices being followed in marine management were the customary ownership of rights to fishing grounds (Fong 1994; Kunutuba & Peniasi, 1983). In the same context just like land rights, traditional fishing area rights are defined, owned, and regulated by *vanua* or *tikina.* A *vanua* or *tikina* is a social unit that includes a number of villages in a district. Consequently, the people are expected to limit their use mainly their allocated areas and those seeking to use grounds belonging to others should get permission from the chiefs or the owners. Veitayaki (undated, p. 10) even pointed out that “from time to time fishing ground owners may declare portion of their grounds as reserve areas intended for special purposes such as wedding, birth, or even death ceremony” (as cited in Ravuvu, 1983). In other instances, the people can place restrictions on fishing methods to protect the resource from further depletion (Fong, 1994).

Fiji, like most States in the world, was once a colony of a particular maritime state, which in this case under the British rule. Generally, the colonizers usually set their

own management rules for adherence by their subjects. In the case of Fiji, the traditional marine management practice was eventually set aside after the voluntary cession of Fiji to the British Crown on 10 October 1874 (Fong, 1994). Following the cession, customary rights of co-ownership covering their waters and their seabed became exclusive property of the Crown.

3.2.9 Development of legal instruments

Laws while still under the British rule, the South Pacific regional agreements, and the international environmental conventions performed significant roles in the continuing the development of Fiji laws and policies relating to the ocean uses and marine living and non-living resources.

One of Fiji's earliest legislation pertaining to the oceans is the Fisheries Act (Cap 158) of 1942 (Fiji Government, 1942). The Act addresses *inter alia,* fishing activities within a traditional customary fishing area and prescribe a policy that fishing should be within the said area only. Moreover, the law also allows commercial fishing in the traditional customary fishing areas if prior consent of the chiefs and the people holding such rights are obtained. The Fisheries Act established a hallmark of its own where current policies on conservation and exploitation of marine living resources in Fiji are based. This was evident in the Marine Spaces Act of 1978 (Fiji Government, 1978) wherein aside from defining the country's maritime jurisdiction, fishing regulations were also provided and referring specific rules in the Fisheries Act of 1942.

Aside from ratifying the 1982 UNCLOS on 10 December 1982, Fiji also ratified the Wellington Convention and its protocols on 11 August 1993 and 18 January 1994, respectively. The latter convention prohibits the use of long driftnets in the South Pacific. The country placed importance to responsible fisheries management and conservation being parties to the UNCLOS and regional tuna agreements. In the same manner, Fiji is very much in the forefront in the regional management of tuna fishing considering its support of the current initiatives taken by the Forum Fisheries

Agency (FFA) with its member countries towards the management of highly migratory fish stocks in the high seas (UN, 2002).

The Convention on Biological Diversity (CBD) is an international treaty adopted during the 1992 United Nations Conference on Environment and Development (UNCED) or otherwise known as the Earth Summit held in Rio de Janeiro. The entry into force was on 29 December 1993. Fiji became a party to the Convention on February 25, 1993. As a party to convention, it is imperative for the State to formulate its National Biodiversity Strategy and Action Plan (NBSAP). The United Nations Development Program (UNDP) assisted Fiji in drafting its NBSAP. The draft was finished in 1999; however, with the prevailing political instability in the country since May 2000, the NBSAP was shortly shelved (http://www.cbd.int/).

The 1992 UNCED was a major turning point in the field of environmental policy-making in Fiji. As a follow-up to the conference, Fiji developed a State of the Environment Report and a National Environment Management Strategy. The latter document recommended for the establishment of a Department of Environment (DoE) and looked further into the need to overhaul the country's environmental laws. In 1992, the DoE was inaugurated and immediately started working on a proposed bill on sustainable development (Aalsbersberg, undated).

The Sustainable Development Bill (SDB) is an attempt to integrate the environment and development in decision-making. Further, it is seen as "a new comprehensive and integrated legislation that will rationalize, streamline and strengthen Fiji's environmental management frame work" (Fiji Today 2005/2006, p. 57). The ADB extended the funding support to realize the undertaking. The SDB is a legal framework that integrates planning and decision making to ensure that natural resources, as raw materials, would be utilized for development in a sustainable manner. The Bill is also expected to give effect for a mandatory conduct of Environmental Impact Assessment (EIA) in proposed developments and activities, which are likely to have an adverse effect on human health, society or even to the environment. Consequently, in a published government report entitled

"Opportunities for Growth" in 1993 it outlined the country's policies and strategies for sustainable development (UNDESA, 1997).

The SDB initiative is in line with Fiji's aspiration to follow its commitments under the various international and regional conventions and that all stakeholder of the community adopts the developed national policies (UN, 2002). The SDB is considered still far from adoption but based on a document intended for the April 2002 Fiji National Workshop on Integrated Coastal Management, "most national administrative departments and experts use it as the *de facto* environmental management framework for Fiji" (Sustainable coastal resource management for Fiji, 2002, p. 21).

Fiji is also a signatory to the Stockholm Convention on Persistent Organic Pollutants on 14 June 2001. Then it has requested UNEP for financial support in the development of its National Implementation Plans concerning POPs. The plan contains management strategies for the storage, transportation, and disposal of POPs and the main agencies involved are the Ministries of Foreign Affairs, Health, Agriculture, and Environment.

On October 24, 2006, the Fiji government published on its government portal a press release entitled "Fiji sets pace for environmental preservation" (Fiji Government, 2006). In the said article, the Minister for Environment outlined the landmark legislation of the country's parliament with the enactment of the Environment Act of 2005. The Act is enacted primarily for the protection of its natural resources and for the control and management of various developments, waste management and pollution control. The Act also enabled the establishment of a National Environment Council. The Minister added that "the Act ensures that monitoring mechanisms are put in place such as the periodic review of a state of the environment report, natural resource management plan and a natural resource inventory" (Fiji Government, 2006). It was also emphasized that in addition, a draft regulation on Fisheries entitled "Conservation of Archipelagic and Territorial Waters Regulations 2006" has been finalized for cabinet approval. One of its highlights is the intention to declare all sea areas within Fiji's archipelagic waters and territorial

seas, other than customary fishing rights areas determined by the Native Fisheries Commission (NFC), as conservation and protected areas. This is an initial step towards the country's vision of achieving 10% ocean area reservation within four years ahead of the 2020 total attainment goal. Table 3.1 enumerates the various Fiji government agencies involved in ocean and coastal management.

Table 3.1: Fiji Ministries involved in ocean and coastal management and their roles. Source: 2002 Background Paper prepared for the Fiji National Workshop on Integrated Coastal Management. http://www.crc.uri.edu/download/Fiji_National_Paper.pdf (Retrieved April 17, 2007)

Ministry	Agency	Role
Ministry of Agriculture, Sugar and ALTA	Agriculture Department	Responsible for the expansion of commercial agriculture. Promote appropriate forms of agriculture. Land resources planning.
Ministry of Fisheries and Forests	Fisheries Department	Responsible for the development of fisheries within the EEZ and territorial waters and controlling fisheries utilisation and long-term sustainability through management of fishing areas, policing sale of undersized marine produce and prosecuting users of destructive fishing practices
	Forestry Department	To develop the forest sector while using environmentally sound and sustainable practices. Mainly concerned with logging operations and establishment of plantations.
Ministry of Lands, Mineral Resources and Energy	Department of Lands and Survey	Administers all State-owned land and water below the high-water mark. Approve projects involving reclamation and dredging of foreshore and foreshore leases
	Department of Mineral Resources	Regulates exploitation and extraction of mineral resources
Ministry of Housing, Urban Development and the Environment	Department of Town and Country Planning	Accountable for the planning of multiple land use and development
	Department of Environment	Provides advice to other government departments on environment related issues. Develop environmental policy. Coordinating Environmental Impact Assessments. Develop environmental education and awareness programmes. Maintain an environmental information database.
Ministry of Public Works, Infrastructure and Transport	Public Works Department	Provides advice and service to government departments for works on buildings and engineering construction. Also responsible for the provision of safe and potable water for major population centres. Responsible for the provision of adequate sewerage treatment facilities for all major urban centers. Ensuring the appropriate disposal of household and industrial waste
	Marine Department	Issuing of certificates of seaworthiness. Implementation of a number of international conventions dealing with the marine environment
	Ports Authority of Fiji	Provision and maintenance of adequate and efficient port services. Responsible for pollution in ports.
	Native Lands Trust Board	To manage the leasing of native land on behalf of the landowners to ensure sustainability
Ministry of Fijian Affairs	Fijian Affairs Board	To formulate, implement, coordinate and monitor policies and programmes aimed at promoting the welfare and good government of indigenous Fijians
Ministry of Tourism	Department of Tourism	Responsible for promoting and regulating the development of the tourism industry
Ministry of National Planning	Central Planning Office	Responsible for preparing the strategic development plans for Fiji and policy papers, preparation of budget proposals for different ministries etc.
Ministry of Health		Responsible for the Public Health Act which covers a multitude of environmental problems that have harmful effect on health e.g. polluted harbours, air pollution, drinking water quality. Responsible for disease vector control.

3.3 Roles of inter-governmental co-operation in the Pacific

The Pacific-island States succeeded in their co-operative effort on ocean management through their regional mechanisms. The steps taken to protect and preserve the ocean resources were undertaken under the auspices of a particular regional organization for obvious reasons ranging from lack of capacity and scarcity of resources if initiated by the individual island States. The strategy worked for them since a particular organization facilitates the co-operation beginning with the handling of the conferences until the strategic planning for national implementation. On this note, the effort is in line with one of the recommendations put forward by the 1987 World Commission on Environment and Development (Brundtland Commission) that "shared resource characteristics of many regional seas make forms of regional management mandatory" (Curtis, 1993, p. 187).

The role of inter-governmental organization to foster regional co-operation is a significant feature found in the South Pacific area since the establishment of the South Pacific Commission in 1947. The various organizations have undergone a series of re-organization processes since then. South and Veitayaki (2002, p. 62 - 63) described the regional institutional arrangements in the South Pacific through the information obtained from the Secretariat of the Pacific Islands Forum. Fiji is a member of the following regional organizations except the South Pacific Tourism Organisation (SPTO).

a. The Pacific Islands Forum, formerly the South Pacific Forum, established in August 1971 has 16 independent and self-governing States in the Pacific as members. Fiji is one of its seven original founding members. The Forum's responsibility is to facilitate, develop, and maintain co-operation and consultation between and among its members on issues such as trade, economic development, transport, energy, telecommunications, and other matters.

b. The Secretariat of the Pacific Community (SPC), formerly known as the South Pacific Commission, provides advisory, consultative, and training services to

governments on scientific, economic, social, environmental, health, agricultural, rural development, community health, education, demographic, and cultural matters.

c. The Forum Fisheries Agency (FFA) is an offshoot of the Forum Fisheries Convention (FFC) held in 1979. Its task includes assisting members with their initiatives geared toward sustainable development and management of their fisheries and other related activities, such as maritime boundary delimitation, legal, technical and economic issues, monitoring and surveillance of foreign fishing activity, human resource and institutional strengthening, applied fisheries research, policy assessments, and representation at international fisheries meetings.

d. The South Pacific Applied Geosciences Commission (SOPAC) is the progeny of the former Committee for Coordination of Joint Prospecting for Mineral Resources in the South Pacific Offshore Areas (CCOP/SOPAC) of 1972. It is mandated, *inter alia,* to assist in the assessment, exploration and development of island-States' near shore and offshore mineral and other marine non-living resource potential. Other important tasks include development of baseline data for coastal engineering, hazard evaluation, assistance and training for local hydrography.

e. The University of the South Pacific (USP) is the premier educational institution for higher learning established in 1968. Its main campus is in Suva, Fiji.

f. The South Pacific Tourism Organisation (SPTO) offers services through a variety of programmes on training, tourism awareness, and preservation of the environment.

g. The Pacific Islands Development Programme (PIDP) is in operation since 1980. The programme assists the Pacific island leaders in advancing their collective efforts to achieve and to sustain equitable social and economic development consistent with the regional goals. PIDP is a forum through which island-State leaders discuss critical issues on development covering a broader spectrum of issues.

h. The South Pacific Regional Environment Programme (SPREP) is the regional technical and coordinating body responsible for environmental matters in the Pacific region.

The abovementioned inter-governmental organizations are sub-regional agencies working under the auspices of the Council of Regional Organizations in the Pacific (CROP). CROP was formerly known as the South Pacific Organizations Co-ordinating Committee (SPOCC) composed and represented by the heads of the various inter-governmental organizations. CROP usually serves as the overall secretariat that facilitates information exchange and co-ordination among the inter-governmental organizations. One of the milestones initiated at the level of the CROP is the drafting of the proposed Pacific Islands Regional Ocean Policy (PIROP). On top of the regional inter-governmental organizations, there are other established international organizations, both inter-governmental and NGO, working closely with Pacific island-States.

3.4 Development of national ocean policy

The concept of a regional ocean policy reverberated during the 1999 Forum Leaders of the Pacific island-States. The CROP was given the lead role to draft the proposal, and in turn tasked its Marine Sector Working Group (MWSG) to develop one. Finally, three years later during the Pacific Islands Forum held in Fiji in August 2002, the Heads of States and governments formally approved the proposed draft of the Pacific Islands Regional Ocean Policy (PIROP). The primary aim of the policy is to ensure the future sustainable use of the oceans and its resources by the Pacific islands' communities and partners.

To put further momentum on the implementation of the regional oceans policy to the national level, a Pacific Islands Regional Oceans Forum (PIROF) also followed on February 2004. The PIROF ensures continuous consultation and information gathering among the regional stakeholders that eventually lead to the formulation of a “regional framework for integrated strategic action” (PIROF, 2004).

The PIROP is the embodiment of the aspirations of the Pacific island communities for a sustainable use and development of its ocean resources. In turn, it will serve as the reference framework of the national ocean policies of the Pacific island States. The principles integrated in PIROP emanated from the UNCLOS, UNCED agreements and Conventions, Chapter 17 of Agenda 21, the Barbados Programme of Action, and the World Summit on Sustainable Development's Plan of Implementation. And these are: 1. improving our understanding of the ocean; 2. sustainably developing and managing the use of ocean resources; 3. maintaining the health of the oceans; 4. promoting the peaceful use of the ocean; and 5. creating partnerships and promoting cooperation (PIROF, 2002).

On April 28, 2005, the Fiji government through its online portal announced the approval by its Cabinet of the formulation of an integrated national policy for the management of the country's ocean and its resources. The initiative is under the cognizance of the Maritime Affairs Coordination Committee (MACC). The MACC in turn, is under the supervision of the Minister for Foreign Affairs and External Trade created in a Cabinet sub Committee level where various other national government ministries and departments are also involved as technical sub committees. The technical sub committees are working on the development and amendment of national law and policies covering the areas such as, marine research, maritime boundaries delimitation, fisheries, coastal management, sustainable development and environmental impact, tourism, seabed mining, and the Marine Spaces Act. Other government agencies involved in the crucial undertaking is the Ministry of Finance and National Planning and the Solicitor-General (Fiji Government, 2005).

To date, according to H. L. Wong of the MACC Secretariat, the MACC is already established and has just concluded the conduct of a geodetic baseline survey of the southern islands of Fiji last 14 August 2007 and, in turn will forward the generated data for processing in Australia sometime in September or October also of this year (personal communication, August 26, 2007). The survey is part of Fiji's claim for an extended continental shelf.

4. THE PHILIPPINE SETTING

4.1 Introduction

The Republic of the Philippines is in the Southeast Asian region. According to the website of the Regional Seas Program of the United Nations Environment Program (UNEP), the seas of this region have:

> An astonishing variety of political, economic and social systems matched by its environment: ship-crowded straits, island groups, wide gulfs, shallow estuaries- and some of the most heavily populated countries in the worlds where millions rely on fish for much of their protein. The threats to the region are just as varied, including erosion and siltation from land development, logging and mining, blast fishing in coral reefs, cutting and conversion of mangroves, over fishing, unimpeded coastal development and disposal of untreated wastes (UNEP, 2005).

Chua (2006, p. 9) also shares the view of the UNEP and further describes the region as “a globally important centre of marine biodiversity” largely due to its linkage to the other large marine ecosystems and further added that the seas of East Asia have a lot to offer considering its unexplored biological wealth.

The Philippines is an archipelago lying between three prominent bodies - the Philippine Sea, the South China Sea, and the Celebes Sea (Fig. 4.1). It has a coastline of 36,289 kilometres (CIA, 2007) teeming with coral reefs, mangrove

ecosystems, beach systems, estuaries, and sea grass beds. Its coral reef and mangrove systems are widely sought after areas for scientific explorations. According to Licuanan and Gomez (2000), the Philippine coral reef area is around 26,000 square kilometres and is the second largest in Southeast Asia. On the other hand, mangrove forests of the country have an area of 500,000 hectares in 1918, but estimates received in 2000 declared that it was down to 130,000 hectares (FAO, UNEP, 1981).

Figure 4.1: Map of the Philippine Archipelago
Source: http://www.gov.ph/aboutphil/philmap.asp (Retrieved May 23, 2007)

4.2 Physical geography and demographic information

The archipelago consists of 7,107 islands situated between latitudes 4º 23' N and 21º 25' N and between longitudes 112º E and 127º E with a total land area of 299,764 square kilometres (RP website, 2007). Luzon, Visayas, and Mindanao, are the three main island groups of the archipelago. Approximately 1,000 islands are populated (Dolan, 1991). In 2000, the country's total population is 76 million with a birth growth rate of 2.36% per year with a projection of 88.7 million in 2007 (NSO, 2000). Manila, the country's capital, is the centre of commercial and business activities. It is widely reported that more than half of the country's population is in Luzon, the biggest island group. The national language is Filipino and there are over 100 dialects spoken throughout the archipelago. English is widely used in business negotiations and government communication. Table 4.1 provides other important coastal profile information of the Philippines.

Table 4.1: Philippine coastal Data
Source: http://siteresources.worldbank.org/INTPHILIPPINES/Resources/PEM05-complete.pdf (Retrieved June 3, 2007)

Total land area	**300,000 km²**
Territorial Sea (up to 12 Nm)	**679,800 km²**
Territorial waters, incl. EEZ	**2.2 million km²**
Coastal waters	**226,000 km²**
Oceanic waters	**1.93 million km²**
Coastal municipalities	**822 (out of 79)**
Total coastal population	**64.7 million (2000)**
Population density in coastal areas, year 1990	**227 persons per km²**
Population density in coastal areas, year 2000	**286 persons per km²**
No. of inhabitants per kilometre of coastline	**2,467 persons (2000)**

In a website of the joint team of scientists from the U.S. Office of Naval Research (US-ONR) and Rutgers University Institute of Marine and Coastal Sciences (RU-IMCS)[5] they revealed that

> the Philippine Seas are characterized by complex bathymetry and variable currents, which present challenges for both observation and model simulation. Consequently, the circulation and dynamics within the seas are poorly understood. Yet, the near Strait dynamics and circulation are not only of scientific interest, but also relevant for the safe operation of marine vessels, divers, and environmental surveys by autonomous vehicles (IMCS-OMG, 2007).

Situated east of the archipelago is the Mindanao Trench with a depth of 11,299 meters. This is one of the two important trench systems, the other is Java Trench, that "form natural bathymetric boundaries for the Southeast Asian marine region separating it from the Indian and Pacific oceans" (Morgan & Fryer, 1985, p. 12).

The previously mentioned three prominent bodies of water bounding the archipelago significantly influence the geographic, climatic, and vegetation conditions of the country. The mean annual temperature of the whole archipelago is 26.6 ºC. The high temperature and the bodies of water around the islands the country enhance the country's high relative humidity. The average monthly relative humidity is 71% during the month of March and 85% in September. In the months of March to May the temperature and relative humidity rise to their maximum levels. The Philippines has three distinct weather conditions throughout the year - the rainy season from June to October, the cool and dry season from November to February, and the hot and dry season from March to May (RP website, 2007).

[5] The joint team is involved in studying ocean depths using various global ocean circulation models and focussing on the currents, tidal forces and the effects of El Niño in and around the Philippine seas. The long-term goal of the research is to improve understanding as well as capability in predicting spatial and temporal variables in the area as well as the effects in other important ocean regions.

Water exchange factors in the country's major bodies of water are also an important aspect in physical geography. In a 2003 study by WWF-Philippines, it was revealed that the North Equatorial Current, the most dominant ocean current circulation in the western Pacific Ocean, continuously flows year-round towards the Philippines (as cited in Wyrtki, 1961). Moreover, the straits of San Bernardino and Surigao, the primary passages in the eastern side from the western Pacific, are the major areas for water exchange with the Pacific Ocean.

In the southern part of the country, Sulu Sea similarly provides the role of channel for water exchange and upwelling for the surrounding bodies of water. Similarly, in the 2003 WWF study it also explained that during the northeast monsoon, locally known as *amihan,* the months of February, October, and December the Sulu Sea surface currents are in the general direction of the southwest. Subsequently, the surface waters flow towards the South China Sea through the Balabac Strait south of Palawan and the deep channel between Panay and Mindoro. The surface currents in Sulu Sea change direction during the southwest monsoon, locally known as *habagat,* in the months of June and August.

Local studies revealed that the "Philippine seawaters are typically poor in nutrients ..." (Barut, Santos, Mijares, Subade, Armada and Garces (2003, p. 888). This view was shared by Wyrtki (1961) and Morgan and Fryer (1985) as an effect of relatively low surface productivity in the South China, Philippine and Celebes seas. The productivity situation is further worsened, as mentioned by Barut et al (2003), with deteriorating water quality in the coastal areas due to a number of issues such as, agricultural runoff, domestic sewage, siltation, and higher than the required water quality parameter standards (as cited in Valmonte-Santos et al., 1996; Talaue-Macmanus, 1999).

The country's location in the tropics is naturally prone to environmental disasters (CEG-MO, 2005). This is because of its location not only within the typhoon belt but also within the "part of the western Pacific active arc system, characterized by active volcanoes" (Dolan, 1993, p. 69). Tropical cyclones generally originate from the Marianas and Caroline islands in the Pacific. The said Pacific islands are situated

within the same latitudinal location as the Philippine island of Mindanao. The typhoon path usually follows a northwesterly direction, thus rarely traversing through the island of Mindanao. This also includes the westernmost and southernmost islands. For most of the areas of the country, they may also experience other climate and weather-related events, such as droughts, El Niño and La Niña events and geophysical hazards, such as earthquake-induced landslides, tsunamis and volcanic eruptions.

4.3 Marine political geography

The marine jurisdictional claim of the Philippines traces its roots to a series of historical treaties. It was in the 1935 Constitution when the national territory was defined in reference to the 1898 Treaty of Paris[6] between the US and Spain, as well as citing a 1930 Treaty between the US and Great Britain (RP, 1935). Since then, the succeeding amended Philippine Constitutions refer to it when referring to the extent of jurisdiction of the national territory. However, in the 1987 Philippine Constitution the usual reference to historic or legal title was dropped and re-define the national territory as those that

> … comprises the Philippine archipelago, with all the islands and waters embraced therein, and all other territories over which the Philippines has sovereignty of jurisdiction, consisting of its terrestrial, fluvial and aerial domains, including its territorial sea, the seabed, the subsoil, the insular shelves, and other submarine areas. The waters around, between, and connecting the islands of the archipelago, regardless of their breadth and dimensions, form part of the internal waters of the Philippines (RP website, 2007).

[6] In accordance with Article III, "Spain cedes to the United States the archipelago known as the Philippine Islands…" in exchange for US$20,000,000. For further details, see http://www.homeofheroes.com/wallofhonor/spanish_am/18_treaty.html

Moreover, such shifts made in the Constitution did not matter considering the enactment of prior national laws with significant impact on the country's defined boundaries (Fig. 4.2). Among the important laws are:

a. Republic Act No. 3046 of 1961, as amended by Republic Act No. 5446 dated 18 September 1968: An Act to Define the Baselines of the Territorial Sea of the Philippines;

b. Presidential Decree No. 1596 of 1978: Declaration of certain areas as part of the Philippine Territory and providing for their Government and Administration, that included the disputed Spratly Islands; and

c. Presidential Decree No. 1599 of 1978: Establishment of the 200 nautical mile Exclusive Economic Zone.

Republic Act 3046, as amended by Republic Act 5446 defined the baselines of the Philippine territorial seas (RP, 1961). Accordingly, the legislation defined its baselines by drawing straight lines by connecting the appropriate points of the outermost islands of the archipelago and at the same time reiterating the extent of the territorial limits based on the historical treaties. It also emphasized that those territories over which the government of the Philippines exercised jurisdiction at the time of the adoption of the Constitution are also part of the national territory. In the clarification of its baselines, the following claims were established:

a. all the waters within the limits set forth in the above-mentioned treaties have always been regarded as part of the territory of the Philippine Islands;
b. all waters around, between, and connecting the various islands of the archipelago, formed part of the internal waters of the Philippines; and
c. all the waters beyond the outermost of the archipelago but within the limits of the boundaries set forth in the historical treaties comprises the territorial sea.

The Philippines has also enacted laws, *inter alia,* further claiming the hydrocarbon resources in the country's continental shelf and the establishment of the 200

nautical miles Exclusive Economic Zone (EEZ) through the Petroleum Act of 1949 and the Presidential Decree 1599, respectively (RP, 1978).

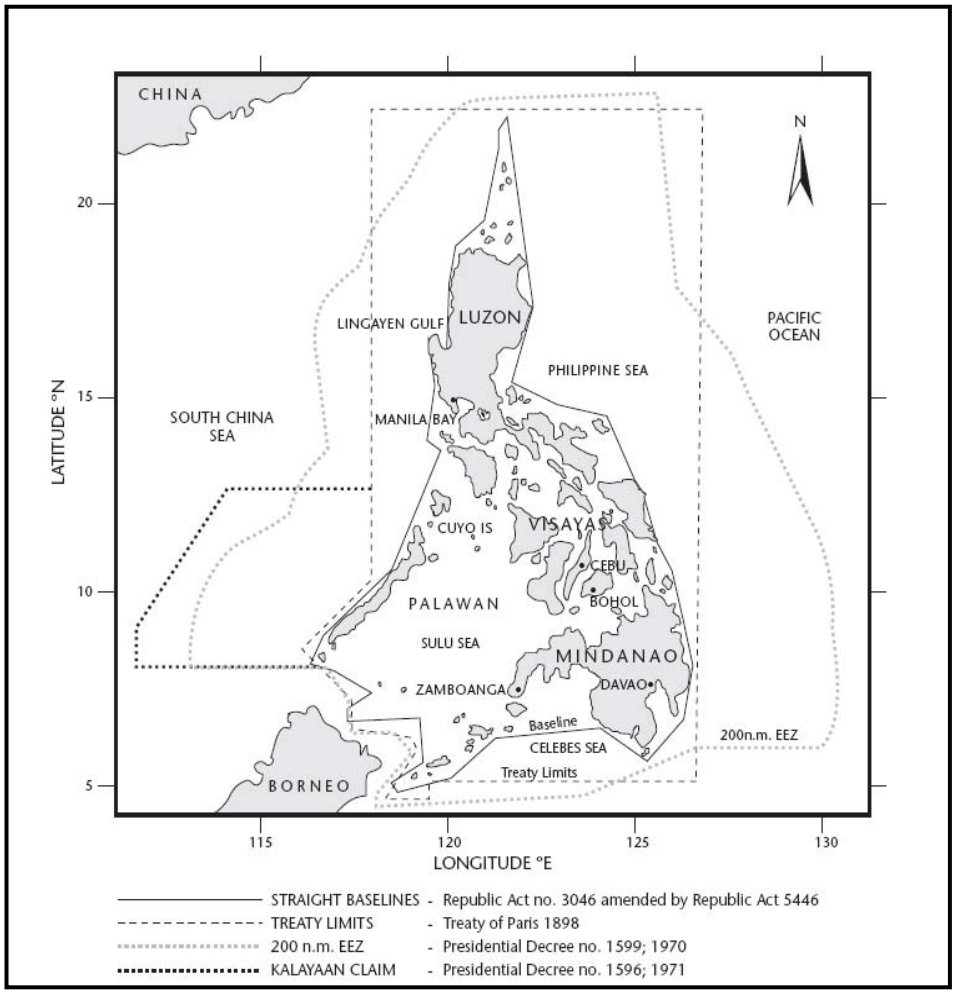

Figure 4.2: The marine jurisdictional boundaries of the Philippines
Source: http://www.worldfishcenter.org/trawl/publications/assessment/pdf/Chapter-32-FA.pdf
(Retrieved May 26, 2007)

According to Churchill and Lowe (1999, p. 119), the Philippines is one of the countries that argued and pursued for a "special regime for archipelagos" since the First United Nations Conference on the Law of the Sea (UNCLOS I) in 1958. The efforts paid off when a regime on archipelago and archipelagic States was included in the UN Convention on the Law of the Sea (1982).

The Philippines signed the UNCLOS III on 10 December 1982 then ratified it on 8 May 1984 with a Declaration (UNCLOS, 1982). The Declaration stressed the right of the country to preserve its sovereign rights over the territorial limits stipulated arising under the aforementioned historical treaties and its Constitution. Among the other stipulations relative to its sovereign rights and obligations resulting from other treaties and national legislations, it also asserted its sovereignty over its archipelagic sea-lanes and further considered its archipelagic waters as internal waters.

4.4 Marine Economic Geography

4.4.1 Fisheries

"Fisheries are culturally, economically, socially, and ecologically important to Filipinos" (Green, S. J., White, A. T., Flores, J. O., Carreon III, M. F., & Sia, A. E., 2003, p. 12). Observations made by Hancock (1995) revealed that indeed many Filipinos depend on their livelihood from fishing. In addition, considering the vast waters surrounding the archipelago, traditionally many Filipinos from the rural areas would turn to the sea for their living.

The Philippine fishery industry involves three main sectors – marine fisheries, inland fisheries and aquaculture (FAO, 2005). The marine fisheries have two sub-sectors, namely the commercial fisheries and the municipal fisheries. Inland fisheries are those fishing activities within the inland waters such as lakes, rivers, and estuaries. On the other hand, aquaculture activities are found in fresh, brackish, and marine waters.

The country's Fisheries Code of 1998, otherwise nationally known as Republic Act 8550 defined commercial fishing as "the taking of fishery species by passive or active gear for trade, business or profit beyond subsistence or sports fishing," while municipal fishing refers to fishing with or without vessels within municipal waters" (RP, 1998). Commercial fisheries are further categorized into small, medium and large, depending on the registered tonnage of the fishing vessels. The municipal

waters are defined as the area measured from the general coastline of a particular town up to 15 kilometers. Moreover, this area is specified under the fisheries law as intended for small and medium scale fishers. Nevertheless, the provision is not absolute since coastal municipal or city government may authorize commercial fishing within the ten point one to fifteen kilometer area.

Statistics provided by the FAO website revealed that in 2003 the Philippines ranked eleventh among the fish producing countries in the world with a total production of 2.63 million tonnes of fish, crustaceans, molluscs, and aquatic plants and seaweeds. In that year, the marine fisheries production contributed 2.1 million tonnes, where 45.38% is from municipal fisheries while 54.62% is from commercial fisheries. The country's main fishery stocks comprise of small pelagic, tuna, and other large pelagic fishes, demersal fishes and invertebrates. The small pelagic or surface and midwater dwellers are the main sources of protein for lower income groups. The various species consist largely of round scads, anchovies, sardines, and mackerels. The large pelagic fish consist of tunas where twenty-one species are in Philippine waters (FAO, 2005). The 2005 World Bank monitoring report considers the importance of the country in terms of its distinctive and rich ecosystem resources that there is an urgency to ensuring their preservation. It is appalling that many of the important marine species in the Philippines are facing extinction due to "habitat loss and degradation, pollution, and local and commercial fishing activities" (World Bank, 2005).

4.4.2 Seabed Resources

The country has rich deposits of various important minerals such as, gold, silver, iron, copper, lead, manganese, zinc, and other metals, as well as coal, limestone, clay, marble and other non-metallic minerals, both inland and at its continental shelf. Moreover, in view of the potential reserves of all seabed minerals and other natural resources, Presidential Proclamation No. 370 was passed in 1968, declaring the area as subject to the country's jurisdiction and control (President, RP, 1968).

Significant oil and gas reserves abound in the archipelago. Information from the country's Energy Ministry makes it clear that hydrocarbon exploration in the country started way back in 1896, however the exploration activities started to boom during the 1950s to 1970s. The first major oilfield discovery was reported in 1989 off the deep waters of Palawan, west of the archipelago. In 1990, the largest gas discovery known as Malampaya gas field was discovered, northwest of Palawan. Shell Philippines claimed that Malampaya has a recoverable reserve of about 2.5 trillion cubic feet and some 85 million barrels of condensate. At the end of 2005, the Energy Ministry pegged the country's petroleum reserves to a total of 456 million barrels of fuel oil equivalent (DOE, 2005).

Recoverable natural gas reserves in the Philippines are estimated to be 106 billion cubic meters at the beginning of 2004 (Worldwide look at reserves and production, 2003). Presently, the Philippines has two gas producing fields, Malampaya and San Antonio and it is revealed by Facts (2004) that at the current rate of production the fields will be exhausted by the end of the next decade.

4.4.3 Ports and shipping

Considering the large number of islands comprising the archipelago, Lauriat (1985, p. 200) has mentioned that "inter island shipping is critical to the economy of the country." An efficient port system and a reliable shipping industry significantly complement and promote seaway linkages among its islands just as the majority of Filipinos rely on smooth farm-to-road networks and a reliable public transport system.

It was in 1974 when the Philippine government realized the need to re-organize the fragmented agencies dealing with every aspect of port and shipping operations in the country (Lauriat, 1985). Presidential Decree 474 dated 1 June 1974 established the Maritime Industry Authority (MARINA), to oversee the development and regulation of shipping as well as its modernization (RP, 1974a). A month later, the Philippine Ports Authority (PPA) followed with the task to integrate, regulate, and manage all port functions and developments around the country (RP, 1974b).

These two national agencies are closely working under the water cluster under the supervision of the Department of Transportation and Communications (DOTC).

Five years after MARINA was created “the country had 620 vessels of 2.4 million deadweight tonnage registered under its flag and 242 of the vessels are in the domestic inter island trade” (Lauriat, 1985, p. 200). In 2006 the deadweight tonnage increased to an estimated 5 million (PPA, 2006).

On the other hand, PPA is directly managing 115 ports and regulating the operations of over 500 private (commercial and non-commercial/industrial) ports (Llanto, Basilio, & Basilio, 2005, pp. 10-11). Port statistics gathered for the year 2005 show that the port of Manila recorded the highest total of domestic cargoes and foreign cargo volume handled, but in terms of biggest volume of passengers, Central Visayas accounted to 16.82 million or about 35% of the country’s total (PPA, 2005). On top of the PPA-managed and private ports, the Philippines also has 6 independent port authorities operating on the economic and free port zones and about 427 government-developed fishing ports operating either under the supervision of the local governments or jointly with the Philippine Fisheries and Development Authority (PFDA) (Llanto et al., 2005, pp. 11 -12).

4.5 Maritime defence and security considerations

The Philippine military traces its roots back to 1897 at the time of a revolutionary government fighting for independence against the Spanish and American colonizers (Dolan, 1993). The Armed Forces of the Philippines (AFP) used to have four major branches, namely, the Air Force, Army, Constabulary, and the Navy under the umbrella of the Department of National Defence (DND). In 1991, following the implementation of a constitutional provision, the Constabulary was disbanded to form part of a unified civilian national police. Among the three branches of service, the Philippine Navy plays the lead role on matters relating to maritime defence and national territorial security.

In an article published in the Philippine Navy Digest, entitled “Environmental strategy: harmonizing environmental vision and ethic with the Philippine Navy mission,” the Navy’s most demanding task is monitoring the country’s marine jurisdictional areas and marine resources (Philippine Navy, 2007). In the performance of its multi-roles, the Navy has in its fleet two major type commands, the Marine Corps and the Fleet, limited Naval Air Group, a Construction Brigade, as well as Naval Forces strategically situated around the archipelago. The Naval Forces South has the most difficult role of dealing also with problems relating to the Muslim secessionist and terrorist groups with foreign links. Further, the Navy also has the regular deployment of troops in the Kalayaan Island Group (KIG) to ensure and to maintain the country’s sovereignty over the disputed islands. Today, the Navy’s assets comprise mainly of hand-me-downs and surplus but is hoped that one day the first delivery of a truly modern naval asset will take place in view of the enactment of Republic Act 7898 on 23 February 1995 known as the AFP Modernization Program (RP, 1995).

Before 1998 the Navy had in its fold a law enforcement arm, the Philippine Coast Guard (PCG), however, following a major reorganization in the executive branch, the latter was transferred at the Department of Transportation and Communications (DOTC). The PCG remained as potent guardians of the seas even after its separation from the Navy, following the delivery of eight (8) newly built search-and-rescue vessels from Australia. Upgrading of its limited air assets were courtesy of the Japan International Cooperation Agency (JICA). Most of PCG’s newly acquired capability are mainly for search and rescue, aids to navigation, and oil spill response. It has also maintained a fleet of small patrol crafts for maritime security roles in the ports and harbours. In effect, the mission of the PCG caters largely in support of the commercial maritime industry. In 2005, the PCG handled the operation of a fleet of monitoring, control, and surveillance (MCS) vessels. The main task of the MCS fleet is to support the ongoing national effort of protecting the country’s living resources in the EEZ from foreign poachers.

Apart from the concerns relative to the defence of the territorial sovereignty and the protection of the marine resources, the country’s maritime defence and security,

efforts have also been made to tackle the problems of piracy, hijacking, and terrorism at sea. The International Maritime Bureau – Piracy Reporting Centre (IMB-PRC) revealed that in 2002 and 2003, 10 and 12 incidents respectively, were reported (Mukundan, 2005, p. 36) for the Philippines. However, considering the wide seascape of the country the statistics may not cover all the actual offences. Furthermore, not everybody has access to the IMB-PRC system.

The Philippines' maritime defence capability used to depend to the U.S.A. when the latter still had military bases and installations in the country which they occupied for almost 100 years before the it was dismantled in 1991 (Novicio, 2003). Following the withdrawal of the U.S. military installations, Ulanday (2000) reported on the predicament of the country's armed force as "one of the weakest in Asia and 30 years behind in terms of equipment compared with its neighbours as affirmed by then AFP Vice Chief of Staff Lt. Gen. Victor A. Mayo AFP." Consequently, the national defence capability was further placed in a compromising situation when China started its fortification of the Mischief Reef on the disputed Spratly Islands[7] (known as Kalayaan Island Group to the Filipinos) in South China Sea sometime in 1995 (Ramos: Sinos occupying RP reef in Spratlys, 1995). Since then, the Philippines has pursued the renewal of its military ties with the U.S.A. that culminated in 1999 after the Philippine Senate voted for the ratification of the Visiting Forces Agreement (VFA), a pact that permits the U.S. to conduct joint military exercises with AFP and access to Philippine ports (Novicio, 2003, pp. 43-53).

4.6 Coastal and ocean issues

Following the global concern for the environment in the last twenty years, the country's coastal zone areas were made as platform for scientific activities to monitor the effects of the developments to the environment (DENR, DILG, DA-BFAR, & CRMP, 2001). Based on a 1996 cross-national survey of twenty-nine selected

[7] This is a group of 51 small islands and reefs in the South China Sea. Brunei, China, Malaysia, Philippines, Taiwan, and Vietnam claimed or occupied approximately 44 of the islands. The dispute is a result of overlapping sovereignty claims and the islands was thought to possess substantial natural resources -- chiefly oil, natural gas, and seafood.

nations in the area of Integrated Coastal and Ocean Management (ICOM), Cicin-Sain and Knecht (1998, p. 266) reported that the Philippines' major coastal and ocean issues are "fishery depletion", due to over fishing, use of dynamite, and habitat destruction; "coral depletion", through mining; and "loss of mangrove forests and wetlands through expansion of human settlements."

A joint study of Philippine government agencies supported by the United States Agency for International Development (USAID) noted the migration of around 60% of the country's population to the coastal areas (DENR, DILG, DA-BFAR, & CRMP, 1997). The phenomenon exerted pressure on the country's coastal and marine resources. In a subsequent study on the status of the country's food security situation it gave credence to the earlier accounts of Cicin-Sain and Knecht that indeed the fishery resources has been diminishing to a significant rate (Courtney, Atchue III, Carreon, White, smith, Deguit, Sievert, & Navarro, 1999). The concentration of population to the coasts and the lack of opportunities other than fishing have also contributed on the problem of poverty (DENR et al*.,* 2001). Moreover, in the desire of fishers for more catch, while at the lowest yield rate of fish production, destructive fishing practices proliferated resulting in continued loss of habitats (DENR et al., 1997). The scarcity of wild fishes has found a temporary solution in aquaculture and fish farming at the expense of massive loss of mangrove forests (Chua, T-E., 2006; DENR et al., 2001).

In a 1990 report on the status of the Philippine coral reefs, it was shown that 75% have been degraded from a variety of anthropogenic factors (Cicin-sain & Knecht, 1998; Chou, Wilkinson, Gomez, & Sudara, 1994; Gomez, Aliño, Yap, & Licuanan, 1994). On the other hand, 120,000 hectares of mangrove forests remain from the 450,000 at the start of the twentieth century (Alcala, 1996; DENR, 1995; White & de Leon, 1996).

On top of the degradation of the habitats caused by overpopulation in the coastal areas and the continued depletion of the important source of protein for the Filipinos, the country has to guard also its vast marine area bustling with local and foreign fishers, particularly along the tuna belt area along the Pacific Ocean side. Samson

(1985, p. 126) pointed out the constraints of the Philippine Navy and the Coast Guard in looking after the country's lengthy and irregular coastline and having to contend with "poachers from Taiwan, Korean, and other foreign fishing vessels."

4.7 Maritime jurisdictional issues

Prescott (1985, pp. 59-60) describes the Southeast Asian area as where "States border semi-enclosed areas, share a serrated continental coast, and include island chains… connected by continuous continental margins" and a jurisdictional situation where "issues that arise are not based on claims …; instead they are founded on disagreements about the areas within which conventional claims to jurisdiction will operate." Taking into account the Philippines' approach in claiming its maritime jurisdictions already runs the risk of creating controversies and overlapping jurisdictions. Relative to this are the following jurisdictional issues besetting the country as enumerated by Prescott (1985, pp. 64-70).

a. Unresolved boundary areas

1. Malaysia – *the Philippines*: a triangular-shaped area off northeast Sabah in the Celebes Sea where Malaysia's continental shelf claim from a controversial baseline extends beyond lines of equidistance using various islands.

2. Malaysia – Vietnam – *the Philippines*: most of the central and northern South China Sea is claimed by China on historical grounds; all claim ownership of some of the Spratly Islands on various grounds.

3. China (Taiwan) – *the Philippines*: a large triangular-shaped area in the Bashi Channel resulting from Taiwan's declaration of an EEZ following the equidistant line and the Philippines' adherence to the treaty limits as territorial waters.

4. Indonesia – *the Philippines*: a small triangular-shaped area south of Mindanao where Philippine treaty (territorial) waters extend beyond an equidistant line between Philippine and Indonesian archipelagic baselines.

b. Specific boundaries requiring international agreement

1. Indonesia – *Philippines*: EEZ and continental shelf with an approximate segment length of 605 nautical miles between.

2. *Philippines* – Taiwan: EEZ and continental shelf with an approximate segment length of 526 nautical miles between.

3. Malaysia – *Philippines*: in the South China Sea concerning the territorial sea; and relative to the EEZ and continental shelf in Celebes Sea with an approximate segment length of 61 and 84 nautical miles respectively.

4.8 Coastal and ocean resource management

4.8.1 Historical overview

Barut et al. (2003, p. 11) explained that "the degree of pressure or exploitation of any fish stock or fishery is largely influenced by institutional factors, such as organizations, established customs or practices, regulations (both formal and informal), and social arrangements." On this aspect, it is important to take a glimpse at some historical events and traditional practices to understand the circumstances that shaped Philippine fisheries management systems.

The early settlers of the Philippines came from the island of Borneo. They sailed and landed on the Philippine shores on board their native boats called *balangay.* Later the term *balangay* became *barangay* (village) and is now the basic socio-political unit of the country. Each *balangay* is led by a *Datu* (chieftain). "Socially, Philippine society was stratified with a small class of chiefs (*datus*) commanding the loyalty and labor of much larger numbers of free vassals and slaves" (Taylor, 1991, p. 726). Today, in some areas of Southern Philippines the term Datu still exist among Muslim Filipino clans representing a certain tribe that traces its roots in the early times.

In that early period before the country was colonized by the maritime states, "resource utilization and property rights were based on common property principles

within a village" Barut et al (2003, p. 895), and for a long time the natural resource utilization and management system was well established under this set up (as cited in Pomeroy & Carlos 1997).

The series of colonizations of the Philippines was first led by the European Ferdinand Magellan[8] who discovered the Philippines on March 16, 1521 (Dolan, 1991). However, with his untimely demise in the hands of a local chief and warrior named Rajah Lapu Lapu, the chieftain of Mactan Island in the central part of the archipelago, the first attempt of Spain to colonize the islands was frustrated. In 1564, Miguel Lopez de Legazpi led another expedition to the Philippine islands and it was successful only for the Filipinos to learn of their objectives of spreading the Catholic faith while also getting hold of the country's natural resources (Doeppers, 1972). The Spaniards ruled the country from "1565 until 1898" (Doeppers, 1972, p. 769) and in that period the system of resource management was marked by the "establishment of a centralized system of government, including a state-led fisheries management scheme" (Barut *et al*., 2003, p. 895). The colonization of the Philippines by a "European power" is the "first in Southeast Asia" (Taylor, 1991, p. 310).

Following the defeat of the Spaniards in the Spanish-American War, on December 1898 the Philippine islands were ceded by Spain to the U.S.A. through the Treaty of Paris and "a sum of USD20 million paid by US to Spain" (Dolan, 1991, p. 25). The transaction created uproar among the Filipinos and the change of events meant another chapter of either new or continuity of existing management of the islands and its valuable resources. Moreover, Barut *et al.* (2003, p. 895) argued that the Americans maintained the "centralized system of government" of Spain and in addition they promoted "the thrust of maximizing revenues from the colony." The Americans significantly quelled the revolutionary movements in the country. However, the new colonizers noticed the various "cultural differences and mutual animosity between the non-Christians and the Christian majority" and on the other

[8] Ferdinand Magellan a Portuguese sailor, in his quest to reach the Spice Islands in Southeast Asia, renounced his nationality and offered his services to the King of Spain (Charles I), and led the first expedition to circumnavigate the globe. For more literature see http://www.cdli.ca/CITE/exmagellan.htm

hand the situation of various cultural minorities having different concerns apart from the other (Taylor, 1991, p. 729). Hence, although there existed a centralized system, Taylor (1991, p. 729) added that the United States had to employ "separate systems and administrative systems" to address the complex layers of the society.

The centralized system and the revenue-oriented economic policies ushered the era of large-scale fishing technologies and more fish catches (Barut et al., 2003). The centralized management system continued until the 1950s and the 1960s (Carlos & Pomeroy, 1997). The said periods was also marked by the proliferation of commercial fishing companies (Barut et al., 2003) and improvement of economic conditions in the Philippines then gradually slowed in the 1960s as a result of increase in "population growth" and "limited domestic demand" (Taylor, 1991, pp. 734-735).

In the 1970s, there was the enactment of various national policies to support the continuing progress in the fishing industry. There was also the burgeoning open access regime and the emergence of issues, associated with overcapacity in fisheries and increased poverty rate among small-scale fishers (Barut et al., 2003, p. 895; Dolan, 1993). The problems prevailing in the 1970s continued to the 1980s, hence, the shift of policies in management (Barut et al., 2003).

4.8.2 Development of legal instruments

The country's long history of national policies dates back in 1932 during the Philippine Commonwealth era, a transition period for independence (Taylor, 1991), when the Fisheries Act No. 4003 was approved (Philippine Commonwealth, 1932). During the said period, though the country had its own elected President and Vice President; the overall supervision and approval of decisions relating to the implementation of the fisheries law still resting with the American Governor General.

Fast-forwarding to the 1970s, the country saw the enactment of important legislations for advancement of the fishing industry. Presidential Decree No. 43 "declared the policy of the State to accelerate the integrated development of the fishery resources" through promotion, financing, marketing, and other forms of

assistance to the industry “to achieve self-sufficiency in the supply of fish and fishery products” (RP, 1972). In 1975, the Congress passed Presidential Decree No. 704, otherwise known as the Fisheries Act of 1975. This was an attempt to promote an integrated fishery development program and more responsive legislation by consolidating all laws and decrees affecting fishing and fisheries (RP, 1975). The Fisheries Act of 1975 places premium on the management of the fishery resources not only from the vantage point of the national level but also considering the aspirations of the local government units (Barut et al., 2003; Pomeroy, 1995). Presidential Decree No. 704 retained most of the provisions of the 1932 Fisheries Act and became the long-standing fisheries regulations before the new code was enacted in 1998.

It is worth considering that in the late 1970s national policies were enacted at the height of the fisheries technological developments. Among these are the annexation of some areas as part of extended continental shelf (RP, 1978a) and the declaration of the 200 miles exclusive economic zone (RP, 1978b). As previously mentioned under the country’s political geography, the claim over Spratly islands and the EEZ is associated with the turn of events through the enactment of Presidential Decree No. 1596 and Presidential Decree No. 1599, respectively. Both policies were enacted to reserve vital areas for economic and other major foreseeable developments for the country. It was also in the latter part of the 70s when two significant decrees on environmental protection were also passed. The first one is the Philippine Environmental Policy and the other is the establishment of the Philippine Environment Code (RP, 1977a & 1977b). The environmental policy sets forth the guidelines in the conduct of environmental impact assessments while the environment code provided specific environment management policies as well as environment quality standards for pollution control.

Coastal resource management gained grounds in the 1980s following the creation of the Coastal Zone Management Committee in 1979. The period saw the increase in scientific studies focusing on “experiments with community-based management of coastal resources through the implementation of localized marine protected areas” (White, Deguit, Jatulan, & Eisma-Osorio, 2006, p. 288). The initiatives relative to the

community-based management of marine areas were mostly done in coordination with the academe, non-government organizations, and local government units. And most of them are mainly foreign-assisted projects. The identified marine protected areas (MPAs) are mostly found in Central Philippines and some are in Northern Luzon. Barut et al. (2003, p. 896) added that during the middle of the 1980s the fisheries policy shifted gradually and inclined toward the following thrusts:

a. a shift in governance from centralized to localized;
b. a shift from open access to limited access, and;
c. shift from development focus to management.

In the 1990s, the Philippines laid down major policies and legal initiatives in the field of coastal and ocean management (DENR, 2001). During the start of the decade the country saw the dawn of the full empowerment of the local government units to manage their municipal waters (15 kilometers band of waters) and the influx of foreign-funded projects in the field of coastal and ocean resource management (Christie and White, 1997; White, Christie, d' Agnes, Lowry, & Milne, 2005). The devolution of coastal resource management to the coastal municipalities and cities was mandated through the Local Government Code of 1991 (RP, 1991). The newfound responsibility of the local government also opens up the need for capacity-building projects. Hence, funding and development agencies such as the Asian Development Bank (ADB) (White et al., 2006), the Japan Overseas Economic Cooperation Fund (OECF) and the United States Agency for International Development (USAID) through the Coastal Resource Management Project (CRMP, 2003) played key roles in the country-wide coastal and ocean resource management initiatives. In 1992, "the Philippine Congress enacted the National Integrated Protected Areas System Act to provide a national classification system in the designation of protected areas" to provide a buffer area for conservation or other environmental protection purposes (DENR, BFAR-DA, & DILG, 2001, p. 21).

The Philippines' active involvement in the Earth Summit or the Rio Convention on Sustainable Development gained recognition as the first country to establish a dedicated national council to accelerate its commitment to sustainable development at the national level (Barut et al., 2003; White et al., 2006). The composition of the

Philippine Council for Sustainable Development (PCSD) is a cross section of all the stakeholders from the government, business industry and the civil society (CADI, 2007). Following the ratification of Agenda 21 and the creation of the PCSD in 1992, five years later, the country also adopted its national policy on sustainable development known as the Philippine Agenda 21. It is a comprehensive blueprint whereby institutions within and between government agencies, society groups and other institutions are integrated "to manage the economy, critical resources, society and culture, politics and governance …" (CADI, 2007).

In 1994, the Regional Program on Partnerships in Environmental Management for the Seas of East Asia launched their projects in Manila and Southern Luzon (White et al., 2006). The regional program, a collaboration with the Global Environment Facility (GEF), the UNDP and the IMO, is geared towards "regional capacity building and forging institutional arrangements on integrated coastal and ocean management (ICM)" at the local level and further spreading the lessons learned, skills, and experiences to other parts of the region (PEMSEA, 2004).

In 1994, the country adopted a "National Marine Policy (NMP) as an official response to the growing awareness and importance of the marine sector and the ocean environment for national and international security" (DENR, 2001, p. 1). The NMP focused on the implementation of UNCLOS and international environmental treaties, "primarily on the developmental and management" aspect of the marine resources. The latter end of the decade was capped by the legislation of the new Fisheries Code that further reinforces the roles of local government units in coastal resource management (Barut et al., 2003).

4.8.3 Key agencies

A number of national agencies and ad hoc committees are tasked to develop and oversee the implementation of strategies in support of its commitments to international environmental treaties. They are usually found at the national level working under a lead department or under the office of the President. However, a number of them eventually fade into the mainstream once the strategies are absorbed and incorporated into the national programs of concerned national

agencies. Some of them include, the 1976 National Mangrove Committee, the 1978 Marine Parks Task Force, and the 1990 Presidential Commission on Illegal Fishing and Marine Conservation, to name a few. Through the years, the agencies involved in coastal and ocean-related functions grew in number, as illustrated in Table 4.2.

Two of the most prominent agencies with major functions relating to coastal and ocean management are the Bureau of Fisheries and Aquatic Resources (BFAR) and the Department of Environment and Natural Resources (DENR). The BFAR is under the Department of Agriculture (DA) and is the main agency responsible for formulating, administering and implementing fisheries policies. It was created under the Fisheries Decree of 1975 following the renaming of the Philippine Fisheries Commission that was established in 1963 under the Department of Agriculture and Natural Resources (Barut et al., 2003). However, it was only in the 1998 Fisheries Code that it was "reconstituted as a line bureau of the DA" (DENR et al., 2001, p. 51).

On the other hand, relative to the rules and regulations relating to environmental management, land and marine pollution, ecological diversity, minerals, wildlife and other natural resources including threatened and endangered species, the national agency responsible is the DENR. It was in June 1987, through Executive Order No. 192, that the DENR was reorganized after renaming and re-organizing the former Department of Environment, Energy and Natural Resources (DENR, 2006).

Table 4.2: Philippine agencies involved in coastal and ocean affairs
Source: Vol. 2, Research Task Force on National Ocean Policies, The Nippon Foundation

Department	Function
Environment and Natural Resources (DENR)	• General environmental management functions • Environmental protection through parks and protected areas • Regulation of the use of foreshore areas • Resource mapping and inventory • Species protection • Regulation of mining and other resource extractive industries • Coastal management
Agriculture (DA)	• Fisheries management • Coastal management
Transportation and Communication (DOTC)	• Regulation of shipping • Regulation of ports • Regulation of seafarer sector • Maritime security
National Defense (DND) and Armed forces of the Philippines (AFP)	• Maritime security and law enforcement
Foreign Affairs (DFA)	• Foreign policy and relations • Maritime security
Science and Technology (DOST)	• Conduct/support for marine scientific research • Capacity-building
Interior and Local Government (DILG) and Philippine National Police (PNP)	• Supervision of coastal Local Government Units (LGUs) • Maritime Law Enforcement
Energy (DOE)	• Regulation of energy resource exploration and exploitation • Energy development
National Economic Development Authority (NEDA)	• Planning and development at national and regional levels • Oversight over major foreign-assisted projects
National Security Council (NSC)	• Implementation and monitoring of comprehensive security and national security policies • Maritime security
Labor and Employment (DOLE)	• Regulation of seafarer sector
Trade and Industry (DTI)	• Regulation of businesses and trade
Tourism (DOT)	• Regulation of national tourism activities
Justice (DOJ)	• Prosecution of offences • Resolution of jurisdictional conflicts/issues between government agencies
Public Works and Highways (DPWH)	• Regulation of coastal infrastructure
Budget and Management (DBM)	• Allocation of funding
Finance (DOF)	• Sourcing of finances
Local Government Units (not a national Department)	• *Fisheries management* • *Environmental management*

4.8.4 Commitment to international treaties

The active participation of the Philippines in various inter-governmental top-level meetings concerning the oceans further continued even after the first conference on environment and development in Stockholm in 1972. In that conference, the country's delegate expressed concern over the issues of "exposures to nuclear weapons testing," unabated "waste disposal," advanced fishing technologies of maritime powers, and the "basic problem on human settlements" and calls for a joint developed-developing nations' actions on the issues and that the Philippines has placed impetus on incorporating "environmental considerations" into its national development policies (Tolba, 1988, pp. 299 - 301). Ten years later, the Philippines figured also in the Nairobi Conference and posed on the agenda the need to address "the birth of ecological humanism" (Tolba, 1988, p. 302).

Since then the Philippine government has emphasized the importance of global efforts toward coastal and ocean issues and affirmed its commitment by ratifying the series of international environmental treaties and program of actions initiated by the UN (Table 4.3).

Table 4.3: Key International Treaties ratified by the Philippines
Source: Department of Environment and Natural Resources, Bureau of Fisheries and Aquatic Resources of the Department of Agriculture, & Department of Interior and Local Government. (2001). *Philippine Coastal Management Guidebook No. 2: Legal and Jurisdictional Framework for Coastal Management*. Cebu City, Philippines: Coastal Resource Management Project of the Department of Environment and Natural Resources (p. 26)

International Convention for the Prevention of Pollution from Ships, 1973/1978 (Annex I – V)
Convention on International Trade in Endangered Species of wild Fauna and Flora (CITES)
1982 UN Law of the Sea Convention and Agreement Relating to Part XI
Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, 1989
Vienna Convention on the Protection of the Ozone Layer, UNEP, 1985
Montreal Protocol on the Protection of the Ozone Layer, UNEP, 1987
Civil Liability Convention and FUND Protocol 1992
Agenda 21, UNCED, 1992
Global Programme of action for the Protection of the Marine Environment from Land-based Activities, 1995
Code of Conduct for Responsible Fisheries, FAO, 1995

4.8.5 The National Marine Policy (NMP)

The 6-member Cabinet Committee on Law of the Sea was established by virtue of Executive Order No. 738 dated 3 October 1981 and was primarily tasked to oversee the implementation of the 1982 Treaty of the Law of the Sea with respect to political, economic, strategic, security and other implications, with the Ministry of Foreign Affairs as the lead coordinating agency (President, RP, 1981). On 25 June 1985, Executive Order No. 1034 was issued transferring the chair of the cabinet committee to the Prime Minister (President, RP, 1985). Then in 1988, the committee membership was strengthened by increasing it to twelve through Executive Order No. 328 dated 5 June 1988 (President, RP, 1988).

Moreover, on 12 July 1994, Executive Order No. 186 renamed the Cabinet Committee on Law of the Sea to Cabinet Committee on Maritime and Ocean Affairs (CABCOM-MOA) and among its important tasks was to develop "a comprehensive action plan to implement UNCLOS" (NMP, 1995, pp. 15-17). Thus, on 8 November 1994 the country had seen the realization of the Philippine National Marine Policy (NMP).

The realization of the NMP followed closely the entering into force of the UNCLOS 1982 on 16 November 1994. The NMP embodied the status of the Philippines as an archipelagic State and took into account the importance of the marine resources in economic growth. Relative to its overarching thrust, CABCOM-MOA (1994, pp. 6-12) stressed that it is "primarily a developmental and management program and adopts the following key policy and priority concerns in its national implementation:"

a. Emphasize the archipelagic nature of the Philippines in development planning;
b. View coastal marine areas as a locus of community, ecology and resources;
c. Implement UNCLOS within the framework of the National Marine Policy;
d. Coordinate and consult with concerned and affected sectors through the CABCOM-MOA; and

e. Address the following priority concerns:
    1. extent of the national territory;
    2. protection of the marine ecology;
    3. management of the marine economy and technology; and maritime security.

Considering the level of its implementation and the degree of stakeholders involved, Garcia pointed out the “two levels involved on its organizational structure – the national policy level and ocean sector level” (as cited in Aguilos, 1998, p. 68). The national level is comprised of the Office of the President and the Cabinet, the National Economic and Development Agency (NEDA) and the Legislature while the ocean sector includes CABCOM-MOA, the national government agencies, and the Congress Committees (Garcia, pp. 41 – 49).

Executive Order 186 explicitly provides the functions of CABCOM-MOA and it includes the “formulation of practical and viable policies and addressing the various concerns which affect the implementation of UNCLOS as well as marine-related matters” with the support of the marine affairs research community (CABCOM-MOA, 1994, p. 16). The organizational structure of CABCOM-MOA, including the agencies and committees is found in Appendix 1.

Before the original set-up of the key Cabinet Committee could accelerate its major initiatives in support of the country’s national ocean policy, Executive Order No. 37 dated 24 September 2001 abolished the CABCOM-MOA and subsequently transferred its functions to the Department of Foreign Affairs (DFA) under the Centre for Maritime and Ocean Affairs (President, RP, 2001). The rationale behind the abolition and downgrading of the ocean management committee is to lessen the “cluster and inter-agency committee work” of the Cabinet Secretaries and to concentrate fully in their primary functions of their respective departments.

Sometime in 2000, CABCOM-MOA was already making a series of review and holding panel discussions with the NMP aimed at formulating the necessary component policies, one of which was the national coastal resource management

policy (PCSD, 2001). Prior to this, efforts were underway to amend the NMP to incorporate the principles on sustainable development that were adopted under Philippine Agenda 21 in 1996 (CRMP, 2003, p. 78). Following the downgrading of the CABCOM-MOA, progress on the said initiatives may have been shelved.

5. ANALYSIS

Both States share comparative commonalities in marine affairs to indicate the huge importance to them of their respective ocean spaces and resources in development. The methods in setting up their national ocean management systems vary but within their aspirations and understanding of the international legal regimes. Their approaches in the formulation of a national policy contrast with each other. Fiji took the step of setting it through the long existing regional mechanisms within the South Pacific States, while the Philippines set it up through its own capacity at the national level.

In the ensuing analyses of the initiatives undertaken and governance direction of both countries, their respective national templates are traced based on the four-pillar concept of Annick de Marffy in her article entitled, “Ocean Governance: A Process in the Right Direction for the Effective Management of the Oceans” (Marffy, 2004). The four pillars she was referring to are the legal, political, institutional, and capacity building and in which she further emphasizes that these have been well substantiated at the international level. The question is whether the two countries of Fiji and the Philippines are pursuing respective tracks of their own and within the guidelines of the international sphere and whether they are on the right track.

5.1 Evaluation based on the four pillars of ocean governance

The legal pillar is the legal framework under which all activities in and affecting the oceans is undertaken while the political pillar deals with the actions taken by governmental and nongovernmental bodies tasked to undertake specific functions in

ocean affairs. Meanwhile, the institutional pillar represents the administrative mechanism needed to ensure the approach in enhancing coordination and cooperation between the actors involved, and finally the capacity-building pillar is for the human resource involved in their technical capability, including the budget allocation that forms part of the overall kit to achieve effective governance.

5.1.1 Legal pillar

It is interesting to monitor the extent of regional cooperative effort existing among the South Pacific States. Fiji, being an active member of the South Pacific States, benefits from the mechanisms of the regional inter-governmental organizations and the regional co-operation approach in addressing various ocean and coastal issues. The South Pacific Commission (SPC), which was initially envisioned as a regional forum to promote economic and social stability, has evolved into a valuable model that led to the rise of other equally important inter-governmental mechanisms. Moreover, the various Pacific regional inter-governmental arrangements united and worked collaboratively under the CROP umbrella addressing particular areas of concern. Significant among the various regional level initiatives is in the aspect of promoting ocean governance through the brilliant idea of concocting the Pacific Island Regional Ocean Policy (PIROP). This is a comprehensive legal regime based on the concepts and principles embodied in the international environmental treaties and reflective of the island States' aspirations for the sustainable use and development of its ocean resources. On top of all, the regional ocean policy serves as the basis for drawing up the respective national ocean policies.

Fiji, as already mentioned, is the first State to ratify UNCLOS and subsequently has adopted other international legal instruments and agreements relating to environmental management. In addition, the country has enacted important national legislation and policies governing marine living resources included in its maritime jurisdictional claims. Moreover, Fiji is still dependent on the regional ocean policy arrangement while slowly developing its own version of an integrated ocean policy. Veitayaki South (1993, p. 48) argues that "if regional arrangements are to result in successful ocean management, there is first an urgent need for Pacific Island

Nations (PINS) to establish integrated ocean management at the national level." The author shares South's statement but it is imperative to take a closer look at the capacity of the concerned developing coastal state to develop and adopt a responsive one. While the regional arrangements are within reach and are user-friendly on the part of Fiji, still other models and lessons learned from other States' viewpoints, will play crucial roles. Very good prototypes are made available through the ongoing initiative of the Nippon Foundation in the established Research Task Force on National Ocean Policies[9] (Secretariat of the Global Forum on Oceans, Coasts, and Islands, 2007).

The Philippines has been a regular fixture in the international arena since the creation of the UN in October 1945. The country places premium on its membership in the international community and is active in international treaty deliberations, particularly those relating to marine environment protection. In turn, the country saw its first fisheries law enacted during the Commonwealth era in 1943. However, it was in the 1970s that the country aggressively pursued the enactment of important legislations affecting the coastal and ocean resources. This continued until the 1990s, which form part of compliance with UN conventions and agreements on environmental protection.

The National Marine Policy (NMP) serves as the initial framework for addressing ocean-related concerns in the Philippines. The NMP embodies broad political statements spanning aspects regarding the national territory, marine environment, marine economy and technology, and maritime security. Moreover, one of its main goals is the implementation of UNCLOS, which highlights the archipelagic nature of the country. However, on this aspect it is perplexing how the policy framers managed to set in a correct perspective a prior Declaration submitted upon ratification of UNCLOS in 1982 vis-à-vis the particular objective. The primary

[9] The Nippon Foundation organized in February 2004 through the International Ocean Governance Network (IOGN) and the Research Task Force on National Ocean Policies the first research activity to analyze emerging patterns of national ocean policies, experiences and lessons to develop guidance on best practices.

issue muddling the splendid plan is the Philippine version of archipelagic baseline system based from the historical 1898 Treaty of Paris.[10]

The Philippines' intention to pursue a blueprint governing its marine affairs is right on track, but it is even more disheartening to observe that some parts of the NMP are inaccessible and were even classified as secret documents. Batongbacal (1998) describes the NMP as an instrument not worthy for consideration as a national regime to effective ocean governance since it was not in the first place legally established under Philippine laws. The statement strongly identifies the weakest link of the NMP. It lacks right from the start the most important element for it to become binding. Another critical argument raised against it was made by Garcia (2005, p. 79), when he mentioned that due to its "lack of legal force and without a reliable legal mandate, the agencies could not be forced to adopt and to develop plans and programs supportive of the NMP." On this aspect, subsequent efforts expected from the Cabinet Committee are almost nil following the implementation of the ocean policy. With the lack of determination at the national level to push further attempts to realize the NMP goals, the involved government agencies acted independently in achieving their assigned tasks.

The legal pillar as envisioned by Marffy is literally not present for both developing States. From the point of view of the developed States with significant developments already in the field of ocean governance, the enactment of an Ocean Act is a visible legal rule by which the other main pillars tag along. And, this also includes the establishment of a dedicated Ministry solely for marine affairs. Notwithstanding the initial ocean governance efforts undertaken by Fiji and the

[10] The statement is in allusion with J. L. Batongbacal (2005, p. 2-3) that "scholars in the Law of the Sea would likely find this statement to be inaccurate. The existing baseline system of the Philippines was originally established in 1961 by Republic Act No. 3046, and amended slightly in 1968 by Republic Act No. 5446, both prior to the conclusion of the negotiations for the 1982 Law of the Sea Convention. It uses the straight baseline method in connecting the outermost points of the archipelago into a single unit, rather than the straight archipelagic baseline method contained in Part IV of the Convention. However, instead of using a standard 12 nautical mile limit extending from these baselines, the Philippines claim a territorial sea extending from the baselines to the limits described in the Treaty of Paris of 1898, which is shaped like an irregular rectangle." (as cited from Lotilla, R. P. M., 1995. *The Philippine National Territory: A collection of related documents.* Quezon City: University of the Philippines Institute of International Legal Studies).

Philippines, important observations reveal that their idea of a coherent and comprehensive legal regime for ocean governance is still far from being on the right track.

5.1.2 Political and institutional pillars

Following the formulation of strategic actions to support the national implementation, Fiji approved the establishment of its Maritime Affairs Coordination Committee (MACC) in 2005 with a mandate to draft the country's integrated national ocean policy. The MACC is a Cabinet sub committee level under the supervision of the Ministry for Foreign Affairs and External Trade with the participation of relevant ministries and departments. On the other hand and in similar fashion, in the Philippines the CABCOM-MOA is a Cabinet level committee chaired by the Minster of Foreign Affairs supported by a technical committee and a research community.

Nonetheless, it was pointed out that one of the MACC initial activities is the conduct of a full-scale geodetic baseline survey of Fiji's continental shelf claim. MACC is initially looking at the country's vital maritime claims to be able to address, *inter alia*, issues on further continental shelf claims and boundary delimitation. In contrast, for the Philippines the supporting mechanisms were already reviewing and deliberating the necessary components and amendments to carry out its ocean policy when the CABCOM-MOA was dissolved and then downgraded as a division of the Department of Foreign Affairs (DFA). Thus, the DFA was left to address the implementation on its own level. The Department started with the "delineation of territorial and maritime boundaries and designation of archipelagic sea-lanes" (Garcia, 2005, p. 76) which until now is still ongoing.

Fiji is at its infancy stage to visualize the governmental mechanisms employed to ensure an integrated approach in enhancing coordination and cooperation between the stakeholders, governmental and non-governmental, involved through the MACC.

On the other hand, during the period when the NMP was already in force in 1994 and following the dissolution of the CABCOM-MOA in 2001, important activities were already worked out. Foremost among these is the study made by the Technical Committee of the CABCOM-MOA on the policy flaws of the NMP thereby recommending its revision. Meanwhile, two foreign-funded projects embarked on a national environmental policy review at the strategic level. These were the Coastal Resource Management Project (CRMP) under the United States Agency for International Development (USAID) (DENR and CRMP, 2001, p. 3) and the Regional Programme on Partnerships in Environmental Management for the Seas of East Asia (PEMSEA), jointly under the United Nations Environment Program – Global Environment Facility (UNDP-GEF) and the IMO (PEMSEA, 2006). The CRMP eventually developed a National Coastal Resource Management Policy (NCRMP) while PEMSEA worked on a Sustainable Development Strategy for the Seas of East Asia. Finally, the University of the Philippines (UP), a State university, embarked on a new curriculum known as "Archipelagic and Ocean Studies Program (Arcoast)" (Batongbacal, 2001). The new program intended to provide a new approach in understanding the structures and processes associated with the Philippine archipelagic environment with also the purpose of eventually assisting the government in the development of policies and programs to enhance an integrated management approach. The NCRMP remained as a proposed draft even after the termination of the CRMP-USAID program in 2004. Moreover, PEMSEA continued until today and has even widened its scope as a catalyst for the region on various environmental issues. The Arcoast program started formally in 1998 and continued to widen its research on various program areas that includes, *inter alia*, food Security, transportation, communication, and tourism, environmental conservation, nonliving resources and renewable energy and marine living resources and biodiversity (UP, undated).

Observation in both countries revealed similarity in the ocean management set-up consisting of a number of agencies involved. The agencies are under different ministries but have ocean management-related roles that in effect complement one another. In the initial phases of setting-up the country's ocean management system, as revealed by Fiji and the Philippines, various agencies need to be pooled together

under a Cabinet Committee. However, in the end a direction towards institutionalizing a permanent ministry needs utmost consideration. This is to ensure that management priorities are addressed swiftly within the dedicated Ministry itself and will not pass through the bureaucratic processes of another Ministry which has cognizance over an agency tasked under the Cabinet Committee.

5.1.3 Capacity-building pillar

Both countries still lack the technical and financial capability to ensure their ocean governance efforts only on their own. Fiji depends on the Pacific regional inter-governmental and non-governmental organizations to enhance their capacity to be able to support the programs of the MACC. In the absence of a national program to support the needs for ocean studies, at the least, it has the University of the South Pacific that has a marine studies program undertaken in collaboration with the International Ocean Institute of the South Pacific. Aside from the presence of UN agencies, other important organizations in the area could provide the necessary technical assistance and fund support in research activities. Among these are the global change SysTem for Analysis, Research and Training (START-Oceania), The Asia-Pacific Network for Global Change Research (APN), South Pacific Action Committee for Human Ecology and the Environment (SPACHEE) and a lot more looking at the welfare of the small island developing States. The underlying apprehension in this respect for Fiji is the alarming observation made by Heathcote (1997, p. 197) on the “emigration of the most talented human resources” out of the country due to “dissatisfaction with the situation.” From the outset, Fiji is laying the blocks necessary to catapult the objectives of the MACC.

In contrast it seems that the Philippines is also back at the starting blocks and still groping for the right approach to entice and develop more oceanographers. The concerned institutions and agencies are working independently although the University of the Philippines (UP) is coordinating its Arcoast program with the concerned government agencies to increase the stake in collaborative and research activities. The Philippine government is also still tight-lipped on how to embark on a program of enhancing a national marine affairs program. Apart from the UP Arcoast

and marine science programs, other institutions with Filipino students taking similar advanced disciplines are usually found abroad in higher learning institutions including the Dalhousie University, some from Australia and the USA, and lately from the World Maritime University in Sweden. Although, the Philippines also has its share of international organizations to work with, none of these really concentrate solely on ocean affairs, thus those who are inclined and qualified would resort to outside agencies offering scholarship grants such as the Nippon Foundation, Ford Foundation, and the Fulbright Scholarship Program, to name a few.

5.2 Other comparative issues

There are other significant common areas of concern identified for both countries, but these were not considered extensively due to the limitations of this study. However, they are important for their relevance in ocean law, policy-making, implementation, and enforcement. Among the recognized areas are the customary ecosystem management practices and understanding UNCLOS provisions relating to maritime claims.

Fiji and the Philippines were once colonies of maritime powers for a long period. It was evident that before the colonizers arrive in these countries, there existed already a prevailing norm among the early inhabitants. On the contrary, laws and policies implemented are under the regime of the colonizers and commonly affected are those relating to the management of living marine resources. Subsequently, foreign practice eventually affected the existing resource management practices of the local populace. Pomeroy (1995, p. 145) declared that in Southeast Asia such systems “have been weakened or have disappeared due partly to institutional restructuring under colonial administrations, technological modernization, the rise of the nation-state, and socio-economic stratification and unequal concentration of power and wealth within coastal communities.” On the other hand, Veitayaki is hopeful that “traditional knowledge, wisdom and experience are valuable, appropriate and still relevant for people in developing countries like Fiji” and hence should be taken into account in the “planning, development of strategies and

resource management arrangements" (undated, p. 18). Hence, further research on this aspect is important.

Nevertheless, both nations also face issues resulting from their maritime claims that largely involve interactions with their neighbouring countries. In the case of Philippines, there is a need to re-evaluate the historical treaties affecting the implementation of the country's archipelagic baseline system. In the same manner, apart from concerns on boundary delimitations, Fiji is also confronted with the problem of interpreting the phrase "fringe of islands" as provided in Article 7(1), characterized by one of the reef systems attached to a main island (USDS, 1984, p. 5). Fundamental in the resolution of the claims of both States is the common understanding of UNCLOS terms through their respective regional agreement mechanisms.

Valencia (1985, p. 33) emphasized that "ocean management policies are influenced by the intersection of ocean concerns with such factors as historical and cultural perspectives and inertia, development priorities, internal and external security considerations, and international relations." Along this line, it is indeed also relevant to consider in future research activities the relevance of identifying other direct and indirect factors that are not visible in ocean policy-making but manifest themselves as significant issues during implementation.

6. CONCLUSIONS AND RECOMMENDATIONS

"The problem today is how to transform an aggregate of sectoral institutions existing at the national and international levels into a flexible and dynamic network that is responsive to the goals of solidarity and sustainability and to our growing knowledge of ecological linkages."

Independent World Commission on the Oceans (1998, p. 140)

6.1 Conclusions

The impressions demonstrated based on the four-pillar concept to effective governance show diverse responses from both States but with generally consistent characteristics. First, inadequacy and lack of a persuasive ocean law and policy characterizes the legal foundation of both countries. Second, inconsistency and uncertainty describes the political and institutional actions in Fiji and the Philippines. However, Fiji demonstrates a considerable progress largely due to the active regional inter-governmental and non-governmental organizations. Third, the capacity building efforts are in their formative years, but it is disappointing to observe the absence of a government-initiated program to support the scattered endeavours. By this, the governments of concerned developing countries fail to harness the various programs in oceanography and marine affairs, particularly those initiated by the educational institutions in collaboration with non-governmental organizations.

The issue affecting the development of a responsive ocean law and policy in the Philippines is mainly its non-conformity to the UNCLOS provisions on archipelagic regime, supported by a Declaration that runs counter to the purpose and intent of

Article 310[11]. It is therefore imperative to re-consider the retraction of the prior declaration as well as the re-stating of the status of waters landward of the archipelagic baselines as archipelagic waters instead of internal waters, except those bodies of water that are in accordance with the provisions of Article 8 on internal waters.

On the other hand, Fiji is a reflection of the array of island developing States (http://www.sidsnet.org/) where authors argue that the main constraints in enabling legislations on ocean law and policy are the limited technical and fiscal resources. In addition, Pio Manoa of the University of the South Pacific highlight the fact that "Fiji has at this stage diverse sources of policy guiding governance" (personal communication, March 19, 2007). Hence, after figuring those out they would add another concern, which is the integration approach at the national level to come up with a singular ocean policy.

Constraints in the Philippine institutional arrangements and mechanisms trace their causes from the weak foundation of the organizational structure. The Cabinet Committee has a vital role to accelerate further the various initiatives undertaken at the various committees below it to the awareness of the executive and legislative branches of government. The original Cabinet Committee structure is essential for it will continue to function as the focal point where it would eventually trigger the major re-organization of all the involved national agencies and offices with ocean management mandates under a distinct Ministry. The decision to disband the Cabinet Committee was a major blunder.

Ocean governance strategies between the two developing countries follow different routes. Fiji has started in 2005 with its preparatory work for the formulation of a National Strategic Plan to guide its Maritime Affairs Coordination Committee (MACC)

[11] Aside from the issues of the Treaty of Paris, the Philippines declared that the concept of archipelagic waters is similar to the concept of internal waters under the Constitution of the Philippines and removed straits connecting these waters with the economic zone or high sea from the rights of foreign vessels to transit passage for international navigation. (http://www.un.org/Depts/los/convention_agreements/convention_declarations.htm#Philippines%20Understanding%20made%20upon%20signature%20(10%20December%201982)%20and%20confirmed%20upon%20ratification , Retrieved August 10, 2007)

and their actions need considerable time to be able to appraise its approach. On the other hand, the Philippines has embarked on an impressive national ocean policy with overarching goals but without a clear direction and a viable action plan to start with. The predecessor of the reconstituted Cabinet Committee overlooking the implementation has been existent since 1981 but obscured in oblivion without documentation of its accomplishments. The various scenarios in Philippine ocean affairs as described in Chapter 4 portray the political situation inundating the country's policy-making with inutile outcomes. In effect, the identifiable deficiencies in the Philippine strategy are the absence of constituency and unfocused political agenda in ocean policy development.

The trend in ocean governance based from the perspectives illustrated by the countries of Fiji and the Philippines is still way below the ideals set at the international level. Both countries are still addressing the issues on multiple ocean uses at the sectoral level rather than the integrated approach. Moreover, while the principle of sustainable development is purportedly the prevailing global trend in environmental management, the developing coastal countries are still at the stage of learning how to harness their ocean potentials within their jurisdictions.

The international community is very dynamic in the formulation of new principles to enhance outmoded approaches in ocean management. Yet the efforts of the developing States of Fiji and the Philippines are still below the first level or even a step back. They are at the setting up phase of their perceived workable ocean governance regime. However, these circumstances should not dampen the optimism of the developing coastal countries but should further push them to strengthen their legislation, institutions, and skills to assess and review their current laws and policies and to transform them into a set of distinct national goals for ocean affairs comprehensible to the whole constituency.

6.2 Recommendations

After having examined the comparative facts pertaining to the aspects of ocean affairs in the developing coastal States of Fiji and the Philippines, the author puts forward two sets of policy propositions. The first set is a combination of existing literature and significant observation[12] of the ocean management practices of developed states, while the second set is a combination of observations and analysis in Chapter 5. In other words, the author coins the first set as the common policy propositions applicable to both developing countries and the second set as the practical recommendations.

6.2.1 Common policy propositions

a. To facilitate legislation of a National Ocean Law that integrates all existing law and policies relating to ocean management, including a proposed reorganization of all agencies and offices with mandates linked to ocean affairs under a separate Ministry. The rationale behind the consolidation of existing agencies and offices is the inability to set up a single lead agency, complete with the technology and experts, handling all ocean management concerns. Attached in Appendix 2 is a proposed structure[13] for further reference. Among the highlights of the proposed structure are the inclusion of a separate and dedicated National Marine Research Centre and an Oceanographic Institute. The Marine Research Centre is an applied science and technology laboratory, while the Oceanographic Institute is involved in the hydrographic research, mapping, and monitoring of the marine environment

[12] Observations refer to the "Field Studies" Program of the World Maritime University, where the author had the opportunity to visit and interact with various personalities and practitioners in coastal and management of different institutions from the countries of Sweden, Denmark, Norway, Germany, Canada, and Japan.

[13] The proposed structure is adopted from the studies made by - Garcia, J. S. (1996). *Proposed concept of a Department of Maritime Affairs in the Philippines and consequential restructuring of the maritime safety administration.* Unpublished master's thesis, World Maritime University, Malmö, Sweden; Lévy, J-P. (1988). Towards an integrated marine policy in developing countries. In *Marine Policy, October,* (pp. 326-342). London: Butterworth-Heinemann Ltd.; and articles provided by Professor Maximo Q. Mejia, Jr., PhD of World Maritime University, Malmö, Sweden.

including fisheries and offshore resources.[14] The Council is distinctive with a fresh mandate to function as an independent scientific advisory body on ocean affairs.

b. In the formulation of a national ocean policy, "ideally should be carried out on the basis of complete knowledge of all existing and potential uses of ocean space and its resources," as described in Chapters 3 and 4 of this study; and "the policy must be stated in a clear, simple and intelligible form, logically consistent, and economically sound" (Lévy, 1988, p. 328). The broad objectives of the ocean policy should have specific objectives and in turn, each specific objective has a particular management strategy, employing short-term action plans to achieve in the end the direct broad objective at its top.

6.2.2 Practical recommendations

6.2.2.1 Fiji

As has been mentioned, Fiji is still at the beginning of its quest for its own integrated national ocean policy to govern its ocean management. The country is still conducting an appraisal of the baselines from which to derive its national integrated strategic plan. All of its activities will be in accordance with the Pacific Islands Regional Ocean Policy and will be the basis over a long period.

Currently, it is best to monitor closely the activities of Fiji in the field of ocean affairs leading to a strategic objective of having its own integrated national ocean policy draft.

6.2.2.2 The Philippines

The national leadership is at the junction of whether to pursue a revised national marine policy or a completely new version. However, before any decision is made, the following practical propositions need first to be satisfied.

[14] The concept is similar to the National Research Council and Bedford Institute of Oceanography of Canada.

a. To commission a study to evaluate the lessons learned from the failed implementation of the National Marine Policy.

b. To evaluate the extent of the implementation of environmental management initiatives at the provincial and local governmental levels since the enactment of the Local Government Code (LGC) of 1991 and the Fisheries Code of 1998. As mentioned already in the fourth chapter, the local government units have jurisdiction over the municipal waters. The extent of municipal waters is 15 kilometres, measured from the general coastline of a particular coastal town. Moreover, as pointed out by Aguilos (1998, p. 448), the LGC "can be a policy tool for ocean management and development in the Philippines to complement a national ocean policy," particularly on the "integrative elements" of "its public development and development-planning processes."

c. To re-consider in the amendment or drafting process of a new national marine policy, the basic concepts involved in Integrated Coastal and Ocean Management (ICOM). Among the important considerations in ICOM is "addressing important functions related to overall patterns of ocean use, well-being of marine and coastal areas, and the protection of key living resource habitats." Accordingly, the application of the major functions of ICOM is crucial in the development, implementation, and attainment of the ocean policy broad objectives. The major functions of ICOM are facilitating "area planning, stewardship of resources, promotion of economic development, conflict resolution, protection of public safety and health, and proprietorship of public lands and waters" (Cicin-Sain and Knecht, 1998, pp. 46-50).

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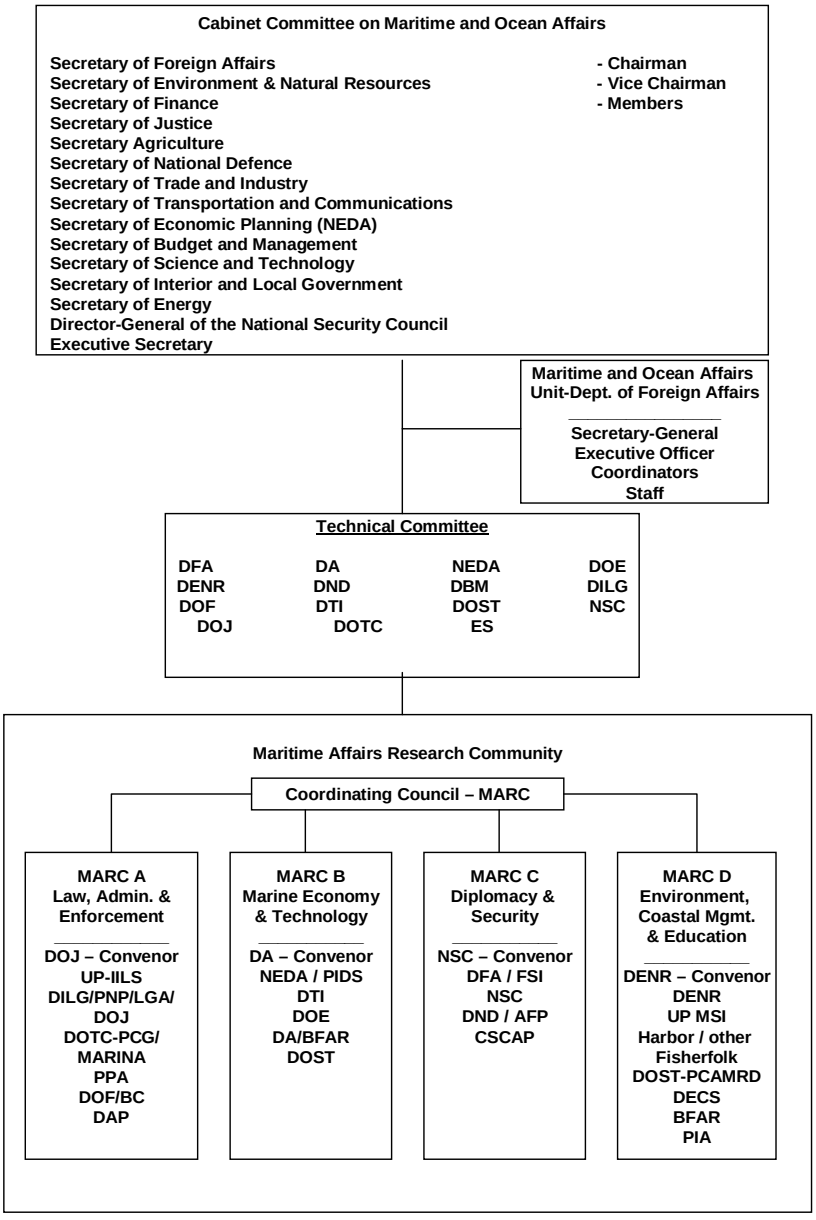
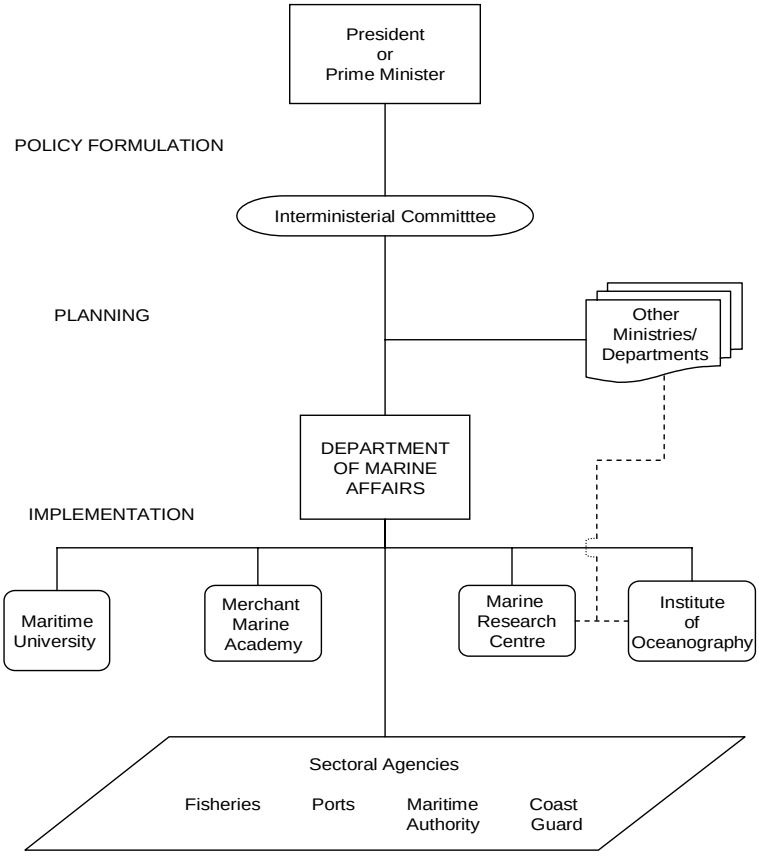
APPENDIX 1



Organizational Structure of the Cabinet Committee on Maritime and Ocean Affairs
Source: CABCOM-MOA (1994). *National Marine Policy*. Manila, Philippines: Foreign Service Institute

APPENDIX 2



Proposed Structure of the Department of Marine Affairs

Adopted from the studies made by - Garcia, J. S. (1996). *Proposed concept of a Department of Maritime Affairs in the Philippines and consequential restructuring of the maritime safety administration.* Unpublished master's thesis, World Maritime University, Malmö, Sweden; Lévy, J-P. (1988). Towards an integrated marine policy in developing countries. In *Marine Policy, October,* (pp. 326-342). London: Butterworth-Heinemann Ltd; and articles provided by Professor Maximo Q. Mejia, Jr., PhD of World Maritime University, Malmö, Sweden.