

DEVELOPING AN INTEGRATED OCEAN POLICY FOR MOZAMBIQUE

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ABSTRACT

Mozambique has a long coastline with a rich diversity of resources with occupy a very relevant national social and economic impact and an important role regionally. Coastal and marine issues have been explored within sectorial programmes following the need for resolving immediate problems such as: erosion, pollution, population density, conservation and management of the resources and others. Because these programmes are normally developed in the short and medium term they do not represent the ultimate solution for the coastal/ocean problems.

Coastal/ocean issues ought to be addressed holistically, as a dynamic system linking the land and marine processes where apart from the general standard of how to develop coastal/ocean policy particular aspects must be take into account for Mozambique. The integrated coastal/ocean policy also must be developed to take into account regional and global initiatives for it's effective functioning.

On the other hand, Mozambique must look at the undefined maritime boundaries as a potential focus of instability and cannot continue to trust simply the good relationships with the neighbouring States. Its maritime boundaries must be defined to guarantee solid peace and safety for the country as well as to exercise an effective sovereignty where policies, strategies, rules and law are implemented within clear maritime jurisdictions making sure that the national practices are in conformity with the LOS Convention.

In this context, it is urgent the call for the necessary steps in order to reach agreement for the maritime boundary delimitation with opposite and adjacent neighbouring countries. This study is a reflection on the relevant Mozambican coastal/ocean issues and ocean policy.

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ABBREVIATIONS AND ACRONYMS

CZ-Contiguous Zone

CLCS-Commission on Limits of the Continental Shelf

EEZ-Exclusive Economic Zone

EU-European Union

ICJ- International Court of Justice

ICZM- Integrated Coastal Zone Management

IMAF- National Institute for Sea and Borders Affairs

IMO- International Maritime Organisation

IOTC- Indian Ocean Tuna Commission

LOS- Convention- Law of the Sea Convention

TS-Territorial Sea

MICOA- Ministry for Coordination and Environmental Action

NOAA- National Oceanic and Atmospheric Administration

PACSIKOM- Pan African Conference on Sustainable Integrated Coastal
Management

PARPA- Action Plan for Reduction of Absolute Poverty

SADC- Southern African Development Communities

UN-United Nations

UNEP-United Nation Environmental Programme

US-United States of America

USAID- United States Agency for International Development

UNESCO-United Nation Educational, Scientific and cultural Organisation

INTRODUCTION

The aim of this paper is to identify some key elements that need to be addressed by Mozambique regarding the implementation of the 1982 United Nations Convention on the Law of the Sea¹. In addition, the paper identifies some core elements that must be considered by Mozambique in developing an integrated approach to the management of ocean and coastal resources. For convenience the paper is divided into three parts. The paper starts out in Part I by providing some background information on Mozambique including the marine resources in sea areas under national jurisdiction; the current administrative structures that are in place for the management of maritime affairs at a national level; the maritime zones claimed by Mozambique and the maritime boundaries with neighbouring States. This is followed by Part II a description of the general principles and core elements that constitute an oceans policy including an outline of the policy integration process. The policies that have been adopted by Canada, the United States, South Africa and Tanzania are briefly reviewed for comparative purposes. Drawing from the comparative examples, the paper then explores in Part III the key elements that need to be put in place for Mozambique to develop such a policy. The paper concludes by identifying the advantages and disadvantages for developing such an approach and places special emphasis on the need to develop an integrated approach to the management of coastal resources.

¹ It is an international treaty which was adopted in 1982 in the third United Nations Conference on the Law of the Sea (UNCLOS III), which took place from 1973 through 1982. The Law of the Sea Convention defines the rights and responsibilities of nations in their use of the world's oceans, establishing guidelines for businesses, the environment, and the management of marine natural resources.

PART I

THE CONTEXT

1. BACKGROUND INFORMATION

1.1 Geography

The Republic of Mozambique is situated on the eastern coast of southern Africa, between the latitudes 10°27 South and 26° 52 South and between longitude 30° 12 East and 40° 51 East. Mozambique is bordered by United Republic of Tanzania in the North, by Malawi, Zambia and Zimbabwe in the west and by South Africa and Swaziland in the South. The total surface area is about 799,390 km², with 786,3880 km of firm land and a coast line of 2,700 km, 13,000 km is internal waters. The country is the 35th-largest in the world. Mozambique has an inter-tropical climate with two seasons: a wet season which runs from October to March and a dry season which runs from April to September.

For purpose of public administration, the country is divided in three regions namely: north, center and south. There are eleven provinces namely: Cabo Delgado, Niassa, Nampula, Tete, Zambezia, Manica, Sofala, Inhambane, Gaza, Maputo Province and Maputo City. The latter is the capital of the country and it is located in the south². According to the last census report which was completed in 2007 by the National Institute of Statistic, the population is approximately 20,530,714. The highest number of citizens live in Nampula province with 4,076,642, followed by Zambeze province with 3,892,854 4,076 and the lowest is in Maputo city with only 1,099,102.

² The first capital was Ilha de Mozambique in the north of the country.

Map 1:
Southern Africa



Source: www.Index.php/Southern_Africa_map.

Map 2 :
Mozambique, Administrative division



Map No. 3706 Rev. 5 UNITED NATIONS
June 2004

Department of Peacekeeping Operations
Cartographic Section

Source: United Nations Department of Cartography

1.2 Coastal Features

The coast of Mozambique may be divided into four biogeographic systems ranging from the coral coast in the north to deltas of the Zambeze and Save Rivers in the south.³ The country has 148 districts and 40 are located in the coastal areas, 10 of the 23 cities are also located in the coastal areas. The high population density places a considerable amount of urban pressure on the entire ecosystem of coast. Interestingly, 10 of the 11 administrative provinces are in coastal areas.⁴ On a comparative basis, the coastal area⁵ of Mozambique is large and makes it the third largest coastal State in Africa after Somalia⁶ and South Africa⁷. The importance of fishing, tourism, and maritime transportation to the economy cannot be underestimated and it is clear that ocean and coastal development will continue to have a major bearing on the prosperity of the country in the future. It should also be emphasised that much of the Mozambican coast feature consists of a pristine ecosystem with high biological diversity and numerous endangered species. The preservation of marine environment as well as coastal fauna and flora play an important part in sustaining the livelihoods of the population that live in coastal areas.⁸ Two of the most important industries for the future of the economy are fisheries and aquaculture.

1.3 Administrative Bodies responsible for maritime/marine affairs in Mozambique

Strictly speaking maritime and marine affairs in Mozambique are different issues. In the case of the former, the scope of the maritime affairs portfolio is limited to managing

³ See Langa p. 34, the coral coast is 770Km in length and extends from Rovuma River in the North 10° 32' S to the Archipelago in the South 17° 20' S; mangal coast which is 978km in length and extends from Angoche 16° 14' S to the Bazaruto Archipelago 21° 10' S; parabolic dune coast with 850km of extension from Bazaruto Archipelago to Ponta de Ouro 26° 52' S reaching the Mlalazi River 28° 57' S, in South Africa; delta coast which occurs in the mouth of the Zambeze and Save rivers.

⁴ Namely: Maputo, Gaza, Inhambane, Sofala, Niassa, Nampula, Zambezia and Cabo Delgado.

⁵ By coastal area or zone is understood to be the interface between the land and the sea. It evolves a dynamic system of relevance economic and environment role, namely seasonal and permanent settlement at the coast, tourism and recreation, mineral extraction, fishing and shellfish gathering, aquaculture, infrastructure development, industrial development, landscape, wildlife, habitat protection and coastal defense.

⁶ Somalia has the longest national coastline in Africa with 3,025 Km.

⁷ It is the second largest with about 2,798 km.

⁸ Antonio Mubango Hongwana, *Diagnosis of Mozambique Coastal Zone*, 2007.

ships, ports, and in the case of the latter it includes responsibility for the protection and preservation of the ecosystem as well as the exploration and exploitation of its natural resources. The administrative structure is relatively simple with maritime affairs coming under the auspices of the Ministry of Transport and Communication and marine affairs coming within the responsibility of the Ministry for Coordination of Environment Action. Prior to 2001 issues related to borders and sea affairs were under the scope of the Ministry of Foreign Affairs and Cooperation. In practice however, many borders and sea issues were dealt with by different institutions.

Since independence, Mozambique has been a member of the United Nations and ratified the 1982 LOS Convention in 1997. Mozambique is also a State party to other international organizations that deal with ocean affairs such as International Maritime Organizations it also participates in the work of the International Seabed Authority. At a regional level, it is a member of Southern Africa Development Community (SADC). Responsibility for implementing various international treaties including the LOS Convention rests with different Government departments and institutions, some of which are not directly concerned with maritime or marine affairs. In 2001, the Government recognised the importance of coordinating all departmental efforts aimed at implementing the LOS Convention and created the National Institute for Sea and Borders Affairs (IMAF)⁹. Essentially, this is a subsidiary body of the Ministry of Foreign Affairs and Cooperation which means that the parent Ministry is still responsible for policy in relation to borders and sea affairs. IMAF on the other hand is an executive and technical body which coordinates day-to-day issues for the parent Ministry. In discharging this task, IMAF is assisted by two important bodies: the Technical Council which is the coordination and consultation organ for sector actions regarding the sea and borders; and the Coordinator Council¹⁰ which involves different Ministries which deal with sea and borders issues.

⁹ Law n° 03/2001 of 3 July, I Serie, Number 7, 2° Supplement.

¹⁰ Decree no. 18/2001, I serie, Supplement 26.

1.4 Relevant domestic legislation

Notwithstanding the fact that some activities have gone on for many years such as fishing and the management of maritime boundaries, many laws and institutions are in the earlier stages of development as outlined below.

Below are listed and summarized examples of some acts related with the sea:

- 1990, 3/09 September Fishing Act

It provides the legal framework regarding the planification and management of fisheries as well as the regulation and adoption of the necessary measures for resources conservation, fiscalization of the fisheries quality products for exportation. As it will be mentioned below because the law was enacted before the adoption of the LOS Convention, there are some aspects that are not in conformity with the LOS Convention which means that the law needs to be revised.

- 1996, 26/11 Ratification of UNCLOS

Taking advantage of the political change in the country, it was also

- 1996, 04/01 Law of Sea

This law defines the Mozambican maritime jurisdiction and provides the support for the administration, regulation and maritime activities in the country.

- 1997, 01/11 Environment Act

The law provides the legal framework for a good management of the environment and its components in order to achieve a sustainable development in the country.

Some institutions directly linked to the sea:

- 2001, 03/07 National Institute for Sea and Borders Affairs

This is the State body responsible for the coordination of all the sea and borders affairs issues. Representing the Government effort to concentrate the resources in one main organ and gain more benefit from its action.

- 2004, 18/08 Marine National Institute

Among other mandates, the Institute is entitled to exercise the maritime authority in the maritime jurisdiction, lacustrine rivers and the public domain.

- 2004, 20/08 National Institute of Hydrograph and Navigation

This institute deals with technical and scientific activities in order to guarantee the safety of navigation and contribute for the development to the country in the scientific and environmental areas.

- 2004, 20/08 National Institute of Petroleum

It is the State institute that among other attributions is entitle to regulate and fiscalize the research, production, transportation of the petroleum as well as to propose development policy and norms regarding petroleum operations.

Note that after independence, Mozambique experienced a civil war lasting sixteen years, which end in 1990, this fact is obviously why there has only been recently (as shown above) an increase in the number of approved acts concerning modern environment, fishing and ocean affairs.

The law 4/96 of 4 January calls for a maritime policy¹¹ in the article 3(1), this article advances with some proposals of objectives such as:

¹¹ Note that maritime policy written in the Mozambican Law of the Sea is substantially different then ocean policy that is being discussed in this paper. The perspective reflected in the Mozambican Law of the Sea deals with shipping and not exactly with the governance of the ocean. However, it is important to refer that ocean policy and maritime policy are two terms used by two groups of countries to refer the same reality. The first group of countries which use ocean policy includes the United States of America, Canada and all those who are be developing ocean policy, the second group are those who join the European Community. To be precise, maritime policy is a term mostly used by European Community to refer the governance of the sea. In the case of Mozambique, reading the articles it is clear that maritime policy relates to issues of shipping.

- Maintenance of sovereignty and national marine integrity;
- Development and improvement of the national marine economy;
- Development and social improvement; and
- Environmental and other issues related with the marine activities.

This article addresses Government responsibility in adopting plans and norms (laws) for:

- Exercise of State sovereignty under the maritime jurisdiction, in conformity with the law in force and other international laws;
- Adoption of all necessary requirements to apply and implement all maritime international convention which Mozambique is part;
- Administration of all maritime national and international traffic under the national jurisdiction; and
- Development of the Mozambican maritime economy through incentives gives to the owners and companies, promotion of the scientific and technological development in the maritime sector.

2. MARITIME ZONES CLAIMED BY MOZAMBIQUE

Mozambique has established several maritime zones which include: internal waters; territorial sea; the exclusive economic zone and the continental shelf. The maritime limits of several of these zones are projected from the baselines which were first established in 1975. Mozambique also shares a number of maritime boundaries with neighboring States. It is now proposed to say a little more about the baselines, the maritime jurisdictional zones and the boundaries with neighboring states in order to analyze some elements related with the LOS Convention.

2.1 Baselines

In determining the maritime jurisdiction zones claimed by Mozambique, one first needs to consider is the baselines. In this context, it is important to recall that the LOS

Convention does not define what constitutes the baselines, it simply presents the different types of baselines that may be used in different geographical situations¹². However, the subject the baselines are significant for the following reasons: they define the maritime jurisdictional zone (Territorial Sea, Contiguous Zone, Exclusive Economic Zone)¹³; and may in certain instances be used in determining the outer limits of the Continental Shelf.¹⁴ Importantly, the LOS Convention goes on to provide for two types of baselines: the Normal and the Straight baselines¹⁵. The normal baselines is the low-water line along the coast as shown on large scale charts officially recognized by the coastal States¹⁶. The second type is straight baseline which may be used “where the coastline is deeply indented and cut into or if there is a fringe of islands along the coast in its immediate vicinity”¹⁷. Significantly, Mozambique uses both type of baselines on different parts of the coast.

The baselines of Mozambique were first established by Portugal before independence¹⁸ in 1967. More specifically, article 1(4) of Decree-Law no. 47,771 of 27 June 1967¹⁹, reads as follows “closing lines and straights baselines which supplement the normal baselines in Mozambique”. This law came into force under Law no.2130 published on August 22 1966 by the Government of Portugal on the Territorial Sea of the States and the

¹² LOS Convention articles 5 and 7.

¹³ See also Churchill, R.R and Vaught, A. Lowe, *op cit*, p.26 they considerate as one of the “...function of baselines from what points on the coastal the outer limits of such zone are to be measured”. In the same perspective: Symmons, Clive, Ireland and The Law of The Sea, p.39 understands that “baselines an essential concept because from it are drawn the major maritime zones known to international law the Territorial Sea Contiguous Zones, Fisheries Zone (and /or the 200 mile Exclusive Economic Zone) and even for certain purposes, the Continental Shelf under the new definition therefore in the LOS Convention, 1982”.

¹⁴ *Manual on Technical Aspects of the United National Convention on The Law of The Sea* p.9; *The Law of the Sea*, R.R Churchill A, Vaught Lowe “ Baselines is the line from which the outer limits of territorial sea and other coastal states (Contiguous Zones, Exclusive Fisheries Zone Exclusive Economic Zone is measured”.

¹⁵ LOS Convention articles 5 to 7.

¹⁶ See article 5 of the LOS Convention.

¹⁷ Article 7(1) of the LOS Convention.

¹⁸ Mozambique as well as Angola, Guinea was considerate at that time as ultramarine provinces of Portugal and they became independence in the same year; Mozambique became independent on 25 of July 1975.

¹⁹ *The Law of the Sea, Baselines National Legislation with illustrative Maps*. Division for Ocean Affairs and The Law of the Sea, United Nations, New York, 1989, p. 230-231 or website: www.un.org/depts/los.

Ultramarine Provinces²⁰. The Government of Mozambique adopted these coordinates for the baselines after gaining independence in 1976. This was initially achieved by Decree-Law no.31/76 of 19 of August 1976, and subsequently by law no. 4/96 of 4 January 1996²¹, see figure 1 .

The first observation that can be made about the Mozambican baselines is that they are recognized by other States and have not been protested since their establishment in 1970. Nevertheless, we can make number of brief observations about the baselines and their conformity with the LOS Convention. Firstly, similar to many other coastal States such as Ireland, the law in Mozambique omits to specify which tidal datum may be used in the delineation of normal baselines²². This is an important oversight and ought to be addressed in a future reform or revision of the legislation. Significantly, at the time of writing, Mozambique is undertaking such as review. This omission is also significant because Mozambique is in the process of making a submission to the Commission on the Limits Continental Shelf (CLCS) in relation to its extended continental shelf. This submission will address the outer limits of the Continental Shelf where these extend beyond a distance of 200 nautical miles from the baselines from which the breadth of the territorial sea was measure in accordance with the criteria set for the down in article 76 of the LOS Convention.

The second aspect of the baselines that requires careful consideration is the straight baselines. Along the Mozambican coastline from the North to South there are 28 points specified in the regulation making up the straight baselines which supplement the normal baselines in Mozambique. These points create five straight baseline systems. In two cases these connect offshore islands and reefs with the mainland and, in three other cases, close a deeply indented coast (see figure 1)²³. These straight baselines were first studied

²⁰ See research paper of Jamine, Elisio, *Maritime Boundaries Delimitation, Management and Dispute Resolution*, p15. United Nations-Nippon Foundation Fellowship Programme available on www.un.org/depts/los.

²¹ See Article 4 of the Law no. 4/96 of 4 January 1996.

²² The reason of this need is because there is a dangerous of do not having precise baselines, regarding the physically location of the Baselines, for further information see Long, Ronan, *Marine Resource*, Thompson Round Hall, 2007, p. 124.

²³ Referred in the Decree Law no.47, 771.

by the US Geographer in a report that was published in the 11th of December 1970, before Mozambique became an independent State²⁴. Significantly, these lines are still in force and a few key aspects merit further consideration here.

Firstly, the system of straight baselines are used in two areas, first in the North half of the coastline as far the Zambeze province (from segment 1-2 to segment 25-26). Secondly in the South by closing the Delagoa Bay (segment 27-28). As is evident from the figure1, that from Cabo Delgado, Point no.1 to Ponta Maunhambe, Point No. 9, the use of straight baselines is justified by the shoals, reefs, islands and bays which are located along the coastline. After Ponta Maunhambe and to Memba Bay, the coastline is uniform and the baseline is of the normal type: the low-water line. Memba Bay is enclosed by a straight baseline, as well as the Fernão Veloso Bay. Between Fernão Veloso Bay and Canducia Bay the shape of the coast is also uniform and again the baseline is of a normal type.

The second point of consideration is the nature of the coast. As is evident from the map below, the coast of Mozambique has an irregular geographical shape which includes some exceptional natural features such as islands, islets, shoals, and bays. In other words, the structure of the coastline is not uniform and Mozambique benefits from the provisions in the LOS Convention which provides that:

In the localities where the coastline is deeply indented and cut into or if there is a fringe of islands along the coast in its immediate vicinity [...] the method of straight baselines joining appropriate points may be employed in drawing the baseline from which the breadth of the territorial sea is measured²⁵.

²⁴ International Boundary Study, serie A, Limits in the Sea no. 29 Straight Baselines: Mozambique. The Geographer Office of Geographer Directorate for Functional Research, Bureau of Intelligence and Research.

²⁵ Article 7 (1) The straight baseline method became in international law through the recognition by the International Court of Justice in the Anglo-Norwegian Fisheries case of 1951. The case examined the delimitation of Norwegian fisheries zone challenged by the United Kingdom claiming the legality of the lines which was established by the Decree of July 1935, accordingly the UK, See Brown, E.D, *The International Law of the Sea*, p.24, volume I, Dartmouth Publishing Company, Limited, 1994. It should also be noted that the LOS Convention expressly permits the use of different methods, including normal and straight baselines to suit different geographical conditions on the coastline.

Although some authors have suggested that: “It is difficult to see how the northern of Mozambique coastline could be described as deeply indented”, it should nonetheless be noted that “the claimed straight baselines do not appear to have protested by the other States”²⁶ which suggests that they are accepted by other States as a matter of customary international law.

The third point of consideration is the length of the baseline segments. The longest segment measures approximately 60.4 nautical miles in length, (segment 18-19) and the shortest is 2.8 nautical miles, (segment 16-17). In terms of average, the length is approximately 19.7 nautical miles and the sum of the length of the segments is 453.4 nautical miles. There are 8 segments of the Mozambique straight baselines which exceed 24 nautical miles, as outlined in the table below:

Table 1:
Some Straight Baselines Segments

Segments:	Length:
4-5	41.0 nautical miles
6-7	38.4 nautical miles
17-18	27.5 nautical miles
18-19	60.4 nautical miles (Longest)
20-21	27.3 nautical miles
22-23	27.6 nautical miles
25-26	45.5 nautical miles
27-28	44.6 nautical miles

Source: Adapted by the author from The Geographer, Office of the Geographer Directorate for the Functional Research Bureau of Intelligence and Research International Boundary Study Series A. LIMITS IN THE SEAS No.29 straight baselines: Mozambique.

²⁶ See Jane Exclusive Economic Zone, p.209.

Significantly, the 1982 LOS Convention does not specify any criteria regarding the maximum length for baseline segment. Nevertheless, some scholars have suggested that the maximum length of an appropriately drawn segment should not exceed 24 nautical miles.²⁷ However, as noted by Prescott and Schofield, the International Court of Justice in reviewing Norway's baselines decided that they were not contrary to international law even though eight segments of the 1935 baseline exceeded 24 nautical miles in length²⁸. Furthermore, an interesting comparison may be made between Mozambique and Madagascar²⁹, two neighboring States which share a common maritime boundary not yet delimited. Thus, for example, Mozambique's longest segment as referred to above is 60.4 nautical miles and in the case of the Madagascar it is 123.1 nautical miles. There are also many examples of other countries with longer baseline segments.³⁰

The fourth point of consideration is that the LOS Convention prescribes in article 7(3) that "the drawing of straight baselines must not depart to any appreciable extent from the general direction of the coast". The straight baselines in Mozambique are drawn in such a manner that deviates from the general direction of the coast. Most notably, segments 1-2 and 7-8 deviate by more than 15°. The question may thus be posed do these straight baselines conform with the LOS Convention where it states clearly that straight baselines "[...] must not depart from any appreciate extent from the general direction of the coastal [...]". Unfortunately the LOS Convention does not provide a precise answer to this question. However, the general view is that the coastal States must conform with both the letter and the spirit of the LOS Convention and draw their baselines in a manner that is consistent with the LOS Convention. Moreover, it has also to be borne in mind that State practice varies enormously. Many States take the view that the Norwegian baseline system is the standard model³¹, and these baselines do not have an angle of deviation

²⁷ See Roach, J.A.; Smith, Robert W, *United States Responses to Excessive Maritime Claims*, p.75.

²⁸ Prescott, Victor and Schofield, Clive, *The Maritime Political Boundaries of the World*, second edition, Martinus Njgoff Publishers, p.146.

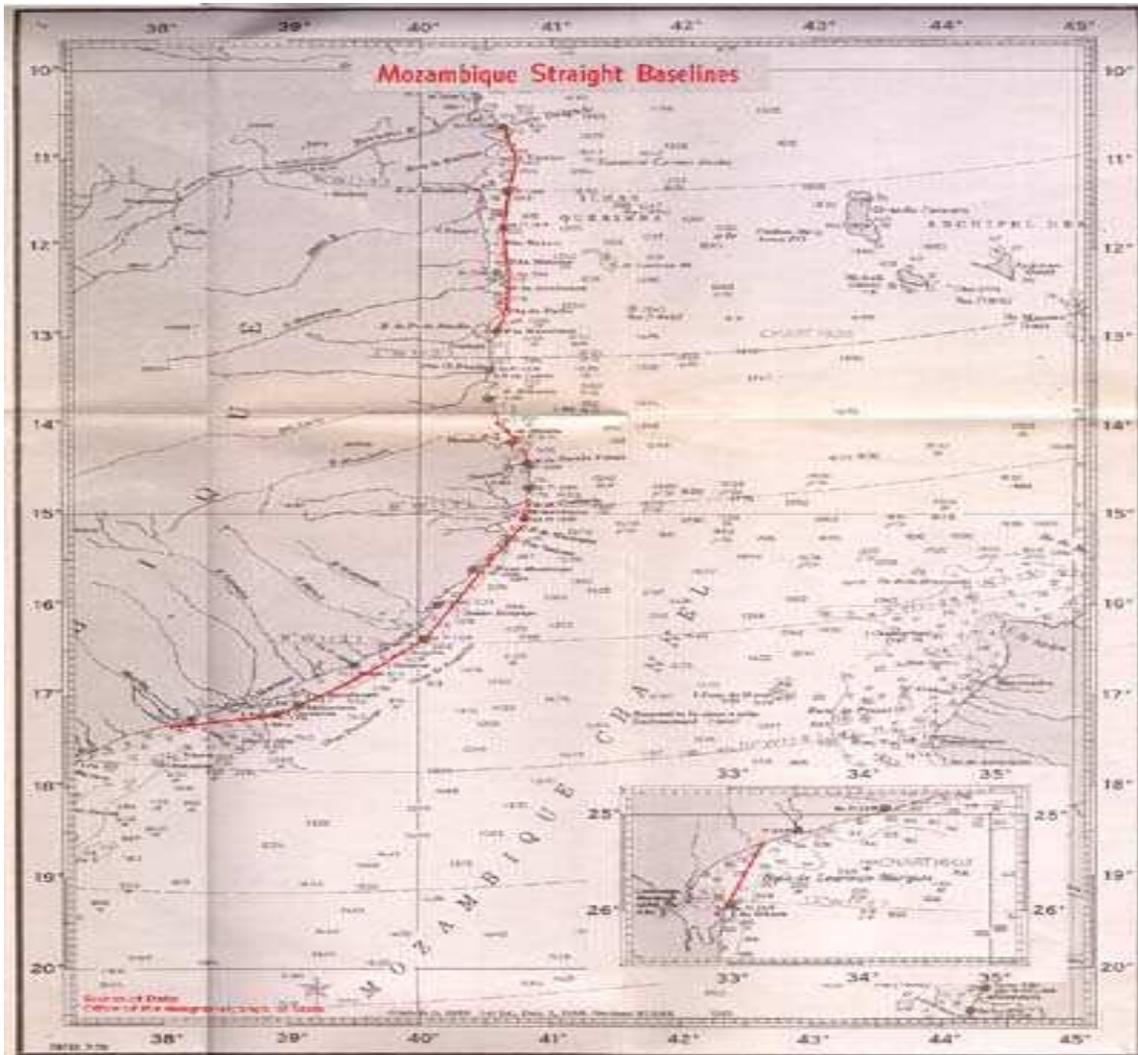
²⁹ Madagascar was the first country in the world to draw a long straight baseline segment.

³⁰ Prescott, Victor and Schofield, Clive, *op cit*, p. 141 and 654. Notwithstanding, Mozambique does not appear in this table, but has also 8 segments longer than 24 nautical miles.

³¹ Churchill R.R, A. Vaught Lowe, *The Law of the Sea*, 3^o edition Juris Publishing, Manchester University Press, 1999, p39.

more than about 15°. Therefore, it may be argued that any baseline that greatly exceeds this angle may not be in conformity with the spirit of the LOS Convention. This is perhaps another issue that ought to be addressed in mind during any future review of the law governing Mozambique's baselines.

Map3:
Baselines of Republic of Mozambique



Source: Department of State, International Boundary Study, Limits in the Sea, 1970

The fifth point of consideration is that there is scope for closing some river mouths (Beira Bay where the Pungue river flows directly in the sea and a bay in the Vilanculos province) with closing lines in conformity with the LOS Convention which provides that

“[...] the baseline shall be a straight line across the mouth of the river between points on the low-water line of its banks”³².

The sixth point of consideration is the Bazaruto Archipelago³³ which is composed of by 5 islands: Bazaruto (the main island), Magaruge, Banque and Santa Carolina Island. Clearly, Mozambique is not an archipelagic State as defined in the LOS Convention and therefore it is not possible to enclose these islands using a system of archipelagic baselines similar to the practice of the United Kingdom in relation to the Malvinas/Falklands as this would not conform with the LOS Convention.³⁴ Nevertheless, it should be noted that under Decree No.39/2001 of 27 November 2001, which creates the Bazaruto National Park, this area is designated as a marine protected area for the purpose of managing all the islands³⁵ as an ecological, social and economic unit. There may however be some merit for bringing these islands within the system of straight baselines but this matter warrants careful technical consideration and analysis in any future review of the baseline legislation of Mozambique.³⁶ One particular feature which will require

³² LOS Convention article 9.

³³ The Government of Mozambique determined by the Decree No.39/2001 of 27 November that the Bazaruto National Park (name given by the colonial Legislative Diploma No.46/71 of 25 of May) is considered the Bazaruto Archipelago National Park, article 2, and revoke the Legislative Diploma no.46/76, article 4.

³⁴ The LOS Convention makes clear distinction between these two features, an Archipelagic State means a State constituted wholly by only one or more archipelagos and may include other islands, however an archipelago means a group of islands, including parts or islands interconnecting waters and other natural features which are so closely interacted that such islands, waters and other natural features form an intrinsic geographical, economic and political entity, or which historically have been regarded as such. At the time of the Third Conference on The Law of the Sea, some mainland States which possessed oceanic archipelagos, argued that there should be no distinction between archipelagos that formed a State and those that belongs to mainland States. This latter position wasn't supported. See *The Maritime Political Boundaries of the World*, Prescott, Victor and Schofield, Clive, p. 141.

³⁵ Santa Carolina, Banguerra, Magaruque and Bangué.

³⁶ The first stage will be to link the islands, Bazaruto Island, Banguerra Island, Magaruque Island and Bangué Island, closing the spaces between them. Then, there would be two scenarios: The first scenario is to draw the straight baselines from point 26, the latter point of the current straight baselines in the North of the country linking the outermost point in the North of the Bazaruto archipelago, but this scenario can be subject of protest by the international community because of the area that can be involved, the length of the segment and it couldn't follow the general direction of the coastline. Furthermore, the area between the latter point of straight baselines up to the Beira Bay the shape of the coastline is really uniform, and after Beira Bay to the area which is the Bazaruto archipelago the coastal configuration does not justify the use of straight baselines.

careful consideration is whether the most Northerly point on the island of Iha Bazaruto aligns itself directly with the general direction of the coast.

In other words, normal baselines is the correct system which was applied in the most part of the Mozambican coastline but, in the Beira Bay area and in the Bazaruto Archipelago region, straight baselines should be applied.

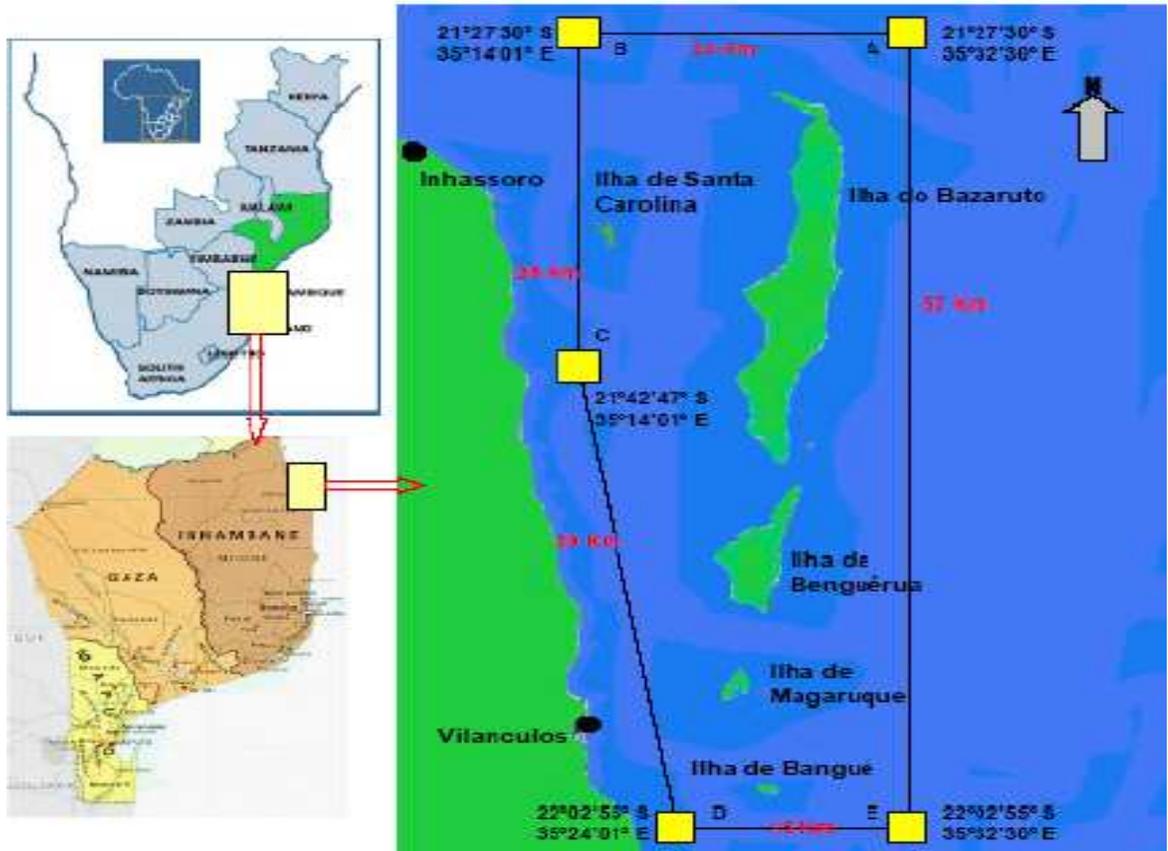
The other scenario is to connect the mainland with the point to the North of the Bazaruto archipelago in Inhambane province, but observing the general direction of the coastline, regarding what is provided in the article 7(3) and for both cases in the South the mainland can be linked by the outermost point of the Bangué Island. This scenario presents itself as more reasonable.

The implication of this hypothetic analysis is that once it will be necessary to determine the territorial sea of these islands, Mozambique could gain more territory seaward. But, in the general context of the entire coastline, it won't have a huge impact because even if Mozambique obtained territory in this region, the new territorial sea of the islands would be small as compared to the North of the country where the coastline is clearly naturally positioned more seaward.

In other words, the territorial sea in the Bazaruto archipelago, south of the country, could never take more advantage than in the north of the country. But, of course, it could push more seaward in the south of the country. Therefore, the new points of the straight baselines could be Point No. 29 in the mainland, Point No. 30 in the north of Bazaruto island, Point No. 31 in the south of the Bazaruto islands, Point No. 32 in the North of the Benguerra Island, Point No. 33 in the South of the Benguerra island, Point No. 34 linked in the North of the Magaruque Island, Point No. 35 in the Bangué Island in the South, and finally Point No. 36 linking the mainland in Vilankulos province. The challenge to determine the maritime boundary with Madagascar increased because of these new straight baselines.

Along, in all Mozambique coastline there are 9 basepoints connecting headlands of the mainland, Points No.1, 8, 9,10,11, 13,14, 26 and 27, 4 segments : 1-3, 10-11, 12-13 and one closing bay: 27-28, the remaining 16 points: 2, 4, 5, 6, 7, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25 connect with islands, islets, reefs, shoals, or other features seaward.

Figure 1:
Bazaruto Archipelago



Source: Extracted from the Paper of Paula Santana Afonso³⁷ presented on the Workshop on MPAs- *is MPAs a useful tool in Fisheries Management*, Norway; 24-25 October 2006.

In conclusion and bearing in mind that the International Court of Justice has pronounced that the straight baseline provisions of the LOS Convention ought to be interpreted restrictively,³⁸ a number of general recommendations may be made regarding the baselines in Mozambique:

³⁷ Paula Afonso, *Bazaruto Archipelago National Park- Mozambique*.

³⁸ *Quatar v. Oman* ICJ; <http://www.icj-cij.org/docket/index.php?p1=3&p2=3&sort=2&p3=0>.

- Mozambique ought to review the baseline legislation and provisions ought to be made for many technical issues such as prescribing datums etc;
- The review of the law should take into account the area of the coastline which has not been enclosed within the straight baseline and consideration ought to be given to closing the mouth of the Pungue river in the Sofala bay;
- Consideration should also be given to closing the gap or space between Point No.26 and Point No.27); and
- Consideration should also be given to bringing Sofala Bay and especially the Bazaruto Archipelago within the system of straight baselines.

However, this suggestion will needed to be assessed to ensure that it conforms with both the letter and the spirit of the LOS Convention.

2.2 Territorial Sea

Historically, the concept of territorial sea was first subject to academic comment during the Middle Ages. One notable jurist during this era, Hugo Grotius, defended the concept of freedom of navigation on the high seas and there was considerable debate among the early jurisprudential scholars regarding the precise extent of the territorial sea.³⁹ More recently, the legal regime governing both the territorial sea and the high seas is codified by the LOS Convention. Today, the maximum breadth of the territorial sea is well settled and Article 3 of the LOS Convention provides that:

Every States have the right to establish the breadth of its territorial sea up to a limit not exceeding 12 nautical miles, measured from the baselines determined in accordance with this LOS Convention.

In practice, the territorial sea is the maritime jurisdiction zone where the coastal State enjoys full sovereignty any subjected to very important limitations regarding the right of ships of all States to exercise the right of innocent passage through the territorial sea. Article 19 of the LOS Convention elaborates on the meaning of the passage and it is important to note that such passage is innocent so long as it is not prejudicial to the peace,

³⁹ See *The Law of the Sea*, Churchill A, Vaught Lowe, *op cit*, p71.

good order and security of the coastal State.⁴⁰ The LOS Convention goes on to elaborate in article 21 what laws and regulations the coastal State may prescribe relating to innocent passage in the territorial sea⁴¹.

In general it may be said that the law in Mozambique pertaining to the width of the territorial sea is well settled. More specifically, Decree-Law no. 31/76 of 19 of August 1976⁴² provides that “the breadth of territorial sea of people’s Republic of Mozambique is twelve nautical miles from the baselines”⁴³. This provision was restated in Law no. 4/96 of 4 January 1996 which provides that “the width of the territorial sea is 12 nautical miles measure from the baselines”. Within these coordinates Mozambique exercise its sovereignty including sovereignty over the adjacent area in the air, space, soil and subsoil of the territorial sea.⁴⁴

Although the law in Mozambique relating to the extent of the territorial sea conforms with international law, there is specific reference in the national law regarding foreign warships or other Government ship operating for non-commercial purposes in the territorial sea. While these ships enjoy the immunities confirmed on them by international law, if they are found to be in non-compliance with laws of Mozambique they will be immediately asked to leave the territorial sea. Moreover, if any foreign vessel during the course of innocent passage violate the laws of Mozambique they will be responsible for any loss and damage that they cause. Significantly, these are the only references to innocent passage in the laws of Mozambique which has not enacted more elaborated measures to give full effect to Part II of the LOS Convention. However some confusion may arise from the misleading references in the parent law (resolution no.21/96, 26 November 1996) to *Mozambique law related to the innocent passage*. As it stands, Mozambique has not adopted any such laws and resolution no.4/96 Law of the Sea

⁴⁰ LOS Convention article 19(2).

⁴¹ LOS Convention articles 18 and 19.

⁴²*The Law of the Sea, Baselines National Legislation with illustrative Maps*. Office for Ocean Affairs and The Law of the Sea, United Nations, New York, 1989, p. 230-231 or website: United Nations: International law, Law of the Sea *Maritime spaces: Legislation and treaties, Date bases*.

⁴³ Article 1(1), Decree-Law no. 31/76.

⁴⁴ It is inferred in the law of the sea, law no 4/96 of 4 January 1996.

simply repeats the general text of Article 31 of the LOS Convention without paying particular regard to the judicial rigor of the language used in the transposition of the international provision into domestic law. In any future reform of national law more attention needs to be paid to implementing the provisions of the LOS Convention on innocent passage in a more elaborate and concise manner.⁴⁵

The other observation that can be made regarding Mozambican law is the specific meaning that is given to the term “passage” and the omission of any reference to passage including “[...] stopping and anchoring, but only in so far as the same are incidental to ordinary navigation or...in danger or distress [...]” as set out in Article 18(2) of the Convention.⁴⁶ This omission needs to be addressed in any future review of national legislation.

Mozambique has only concluded one bilateral agreement with a neighbouring State (Tanzania) regarding the boundary of the territorial sea. This has not proved a problem in relation to the mainland of Mozambique and Madagascar as both States are capable of drawing their respective 12 nautical miles of territorial sea without overlapping the boundary of the State. Nevertheless, the determination of boundary between the two countries is more complex in the Mozambique Channel where there are a number of islands.⁴⁷ The general rule is that:

Neither of the two States is entitled, failing agreement between them to the contrary, to extend its territorial sea beyond the median line every point of which is equidistant from the nearest points on the baselines from which the breadth of the territorial seas of each States is measured⁴⁸.

⁴⁵ The formulation of the text in national law Refer to *the Mozambique law related with the innocent passage*, it could be for example, adopted “when a foreign warship or other Government ship operated for non-commercial purposes for non-compliance **with the Mozambique law or with the international principles of the innocent passage or other international law** and cause loss and damage to the coastal State, the flag State shall bear international responsibility for any loss and damage resultant of it” .

⁴⁶ To support this position of omission see the definition of “passage” See *R.R Churchill A, Vaught Lowe, op cit*, p.81.

⁴⁷ See *The Maritime Political Boundaries of the World*, Prescott, Victor and Schofield, Clive, p. 467 and following, and, more recently, Jamine, Elisio, p.32 and 33.

⁴⁸ LOS Convention, article 15.

Similarly, the same rule may be applied in determining the territorial sea boundary between Mozambique and Comoros⁴⁹, and Mozambique and South Africa⁵⁰.

The boundaries of the territorial sea with the adjacent State in the north, Tanzania, was drawn using the equidistance method of drawing a median straight line, specifically from point “B” to a point 12 nautical miles, located at latitude 10° 18’ 46” S and longitude 40° 40’ 07” E, hereinafter referred to as point “C”⁵¹.

With South Africa in the south, both States have claimed their territorial sea of 12 nautical miles but, there is a question of an undelimited common boundary which should be agreed settled through a future bilateral agreement using the equidistant line which appears to be accepted by both States because of the advantage for the States.

2.3 Contiguous Zone

The Contiguous Zone is an area that may not extend beyond 24 miles from the baselines from which the territorial sea is measured. Essentially the contiguous zone is an enforcement zone where States have limited enforcement jurisdiction to prevent or punish infringement of its customs, fiscal, immigration and sanitary laws. The LOS Convention has specific provisions relating to the control of archaeological and historical objects removed from seabed of the contiguous zone⁵². Some States⁵³, contrary to the LOS Convention, have claimed the right to expand the competence of the Contiguous Zone to include protection of national security interests and thus restrict or exclude

⁴⁹ In the so-called “tri-point”, the point where the common boundaries meet: Mozambique, Tanzania and Comoros.

⁵⁰ Jamine, Elísio, *op cit*, p.40-43;

⁵¹ Agreement between of the Government of United Republic of Tanzania and the Government of the People’s Republic of Mozambique regarding the Tanzania/ Mozambique boundary, article IV, 28 December 1988.

⁵² LOS Convention article 303 (2).

⁵³ Bangladesh, Burma, Haiti, Iran, Sri Lanka, Sudan, Syria, Venezuela, Vietnam and Yemen, see *United States Responses To Excessive Maritime Claims*, J. Ashley Roach and Robert W. Smith, p.20.

warships and military aircrafts, however the US has diplomatically protested 11 of these eighteen claims and conducted operational assertions against others⁵⁴.

Mozambique has claimed its contiguous zone through Law no. 4/96 of 4 January 1996 which provides that:

The contiguous zone to the territorial sea is defined as the adjacent area to the contiguous zone, which extends beyond to 24 nautical miles measures from the baselines.

Significantly, this law is not a legal basis for the exercise of sovereignty in the Contiguous Zone but is aimed at preventing punishing violations of customs regulations and laws, immigration focalization, sanitary protection. However, the law also provides for the punishment of offences related to the preservation of the marine environment and Mozambican territory.⁵⁵ This clearly beyond what is foreseen in Article 33 of the LOS Convention.

In sum, the Mozambican law prevents and punishes acts provided in the LOS Convention committed in the territory and in the Territorial Sea. But, there is an extending for the marine environment prevention which is not expressly provided for by the LOS Convention. Note also that the only extension for State jurisdiction in the Contiguous Zone is with respect to the control of archaeological and historical objects removed from the seabed of the Contiguous Zone.

One aspect of the law in Mozambique that requires careful consideration is the absence of clarity regarding the recovery of archaeological objects from the seabed. Historically, the Mozambique Channel was regularly used as an international route for vessels on passage too and from India. Consequently, there are many historical wrecks and artifacts on the seabed. However, Mozambique has not enacted specific measures to protect underwater cultural heritage and it is unclear how well the provisions of the LOS Convention relating

⁵⁴ Bangladesh, Burma, Haiti, Cambodja, North Korea, Nicaragua, Pakistan, Syria, Vietnam, and Yemen.

⁵⁵ Los Convention article 8(2a), (2b).

to archaeological and historical objects found at sea⁵⁶ are reflected in national law. In addition, consideration should be given by Mozambique to becoming party to the 2001 UNESCO Convention on Underwater Cultural Heritage which at the time of writing had been ratified by 20 States and came into force in 2008. Significantly, South Africa has expressly claimed a maritime cultural zone and their national law provides that:

The sea beyond the territorial waters referred in section 4 (territorial waters) but within a distance of 24 nautical miles from the baselines, shall be the maritime cultural zone of the republic⁵⁷.

The Mozambican law is silent on the delimitation of the Contiguous Zone between opposite and adjacent States. Some authors have expressed the view that its delimitation (for State claiming an EEZ) amount to a delimitation of a part of the EEZ or because an absence of sovereignty or exclusive jurisdiction in this area, there is no reason why Contiguous Zones should not overlap.⁵⁸ Accordingly, in such instances there is no need for delimitation. However, in the absence of clarity on this issue and in view of the difficulties that may arise in relation to the protection of underwater cultural heritage perhaps this is an issue that should need to be resolved on basis of bilateral agreement with Tanzania and South Africa. In the boundary agreement between Mozambique and Tanzania there is no reference to the Contiguous Zone⁵⁹ but there are provisions relating to the Territorial Sea and Exclusive Economic Zone⁶⁰. Tanzania has claimed a 24 nautical miles Contiguous Zone. There may be provision for using the equidistance line to delimit the boundary between both States. As mentioned previously South Africa has also claimed 24 nautical mile contiguous zone⁶¹ and is in the process of negotiating maritime boundaries with Mozambique. Significantly, South Africa has published a

⁵⁶ LOS Convention articles 33(1a) and 303(2).

⁵⁷ Article 6(1) of the Maritime Zones Act, No.15 of 1994 and in the article 6(2) prescribes the rights which are in respect of its territorial sea;

⁵⁸ See Churchill, *op cit*, p.136-137, Ronan Long, *op cit*, p141.

⁵⁹ With respect to Tanzania even in the Act 1989 which established the Territorial Sea and Exclusive Economic Zone, there is no reference to the Contiguous Zone.

⁶⁰ Articles III and IV respectively, Boundary agreement between Mozambique and Tanzania.

⁶¹ Article 5(1) of the Maritime Zones Act No.15 of 1994 “the sea beyond the territorial waters referred in section 4 (territorial waters), but within a distance of twenty-four nautical miles from the baselines, shall be the Contiguous Zone of the republic.

chart showing its baselines and a maritime claim which shows a provisional boundary with Mozambique based upon the equidistance line⁶².

2.4 Continental Shelf

The LOS Convention defines the Continental Shelf⁶³ as the area that :

Comprises the sea-bed and subsoil of the submarine areas that extend beyond its territorial sea throughout the natural prolongation of its land territory to the outer edge of the continental margin, or to a distance of 200 nautical miles from the baselines from which the breadth of the territorial sea is measured where the outer edge of the continental margin does not extend up to that distance.⁶⁴

The Continental Margin “comprises the submerged prolongation of the land mass of the coastal State, and consists of the sea-bed and subsoil of the shelf, the slope and the rise. It does not include the deep ocean floor with its oceanic ridges or the subsoil”. While States can claim a 200 nautical mile EEZ they are entitled to a Continental Shelf of a similar extent without any express proclamation provided that there are no overlapping claims from opposite or adjacent neighboring States^{65, 66}. Moreover, some States have a physical continental margin which extends beyond 200 nautical miles and special provisions are made by the LOS Convention for delimiting such extended Continental Shelf.

Typical and as compared to many other coastal States in the region, Mozambique has an extensive continental shelf which has considerable biodiversity and other resources. Surprisingly, Decree Law no.31/76 of 19 August 1976 which establishes the Baselines, Territorial Sea, and Exclusive Economic Zone makes no reference to the continental

⁶² See Prescott, *op cit*, p.466.

⁶³ This term is subject of two different interpretations, one scientific and other legal.

⁶⁴ LOS Convention article 76(1).

⁶⁵ LOS Convention article 76(5).

⁶⁶ LOS Convention article 77(3).

shelf. The legal concept of the continental shelf is however addressed in Article 13(1),(2) of Law no.4/96 of 4 January 1996 which sets out the limits of the Mozambican Continental Shelf and the Continental Margin. At the time of writing, Mozambique was undertaking the technical studies and the collection of data required in order to make a submission to the Commission on the Limits of the Continental Shelf (CLCS) pursuant to article 76 (8) of the LOS Convention. The preparation of this submission will have to take into account the presence of neighboring States in the Mozambique Channel where there are competing claims in relation to the Continental Shelf. Indeed, it is only in the South of the Mozambique where it will be possible to make a submission without prejudice to matters relating to the delimitation of the boundaries with neighboring States. More specifically, boundaries with the French possessions in the Mozambique Channel will have to be resolved. In the other areas, there are boundaries in the vicinity of Europa Island, in the southwest of Madagascar, Bassas da Índia in the center of the Channel, and Juan da Nova in the north, which need to be resolved prior to making a submission to the CLCS. The possible course of action for Mozambique could include is to making a partial submission in relation to the uncontested portion of the Continental Shelf and later making a joint submission with neighboring States in relation to the disputed areas. Essentially this follows the strategy adopted by Ireland in making their submissions to the CLCS⁶⁷.

With the adjacent countries, Tanzania⁶⁸ in the North and South Africa in the South, there is no recorded difficulty regarding the continental shelf boundary. However, there is a matter for discussion in the tri-point junction between Mozambique, Tanzania and

⁶⁷ “On 19 May 2006, France, Ireland, Spain and the United Kingdom of Great Britain and Northern Ireland submitted, through the Secretary-General, to the Commission on the Limits of the Continental Shelf, in accordance with Article 76, paragraph 8 of the LOS Convention, information on the limits of the continental shelf appurtenant to France, Ireland, Spain and the United Kingdom of Great Britain and Northern Ireland (hereinafter referred to as the "four coastal States") that lie beyond 200 nautical miles from the baselines from which the territorial seas of these four coastal States are measured in the portion of the continental shelf in the area of the Celtic Sea and the Bay of Biscay”. See http://www.un.org/Depts/los/clcs_new/submissions_files/submission_frgbires.htm.

⁶⁸ In the Act of 1989 Tanzania does not claim its Contiguous Zone, South Africa did, article 8 stating as well as defined in the article 76 of the UN Convention on The Law of the Sea 1982.

Comoros, this latter State also which has an unresolved problem with France related with the Mayotte Island located in North of the entrance of the Mozambique Channel⁶⁹.

⁶⁹ See Figure 1.

Figure 2:
Some Islands on the Mozambique Channel



Source: Figure extracted from the work paper “Boundaries situation “of the Directorate of Borders at the National Institute for Sea and Border Affairs.

2.5 Exclusive Economic Zone

One of the great achievements at the third Law of the Sea Conference was the establishment of the Exclusive Economic Zone as a *sui generis* functional zone where coastal States have certain sovereign rights in relation to resources and other economic activities, as well as certain jurisdiction over activities such as marine scientific research.⁷⁰ The origin of the concept may be traced back to initiatives taken by Kenya which was the first State to raise the idea of such a zone at the Asian-African Legal Consultative Committee in January 1971 and subsequently at the UN Sea Bed Committee⁷¹. The justification for such a concept was to satisfy the aspiration of the developing countries for economic development and to realize their desire to gain greater control over the economic resources off their coasts, particular the fish stocks, which in many cases were largely exploited by the distant-water fleets of developed States. Ultimately, the EEZ developed as a compromise solution which reconciled the competing interests of these States,⁷² the States that claimed a 200-miles territorial sea, and developed States which wished to retain freedom of navigation on the high seas⁷³. Today, over 85 countries claim an EEZ and many of these claims are generally consistent with the provisions set out in Part V of the LOS Convention⁷⁴.

The Exclusive Economic Zone of Mozambique was claimed established by the Decree Law No. 31/76 of 19 August 1976 and it may be recalled from the introductory remarks above that this was the first year of the independence.⁷⁵ Today the legal regime is set out in the Law of the Sea, Law 4/96 of 4 January 1996. Article 9 of Law of the Sea provides that the EEZ extends to a distance of two hundred nautical miles from the baseline. In this area, the State has sovereign rights to exploration and exploitation, conservation and management of the natural resources, living or non-living of the seabed, subsoil and superjacent waters. In addition to this, the State is entitled to regulate the establishment

⁷⁰ Because of be a special functional zone situated between the territorial sea and the high seas.

⁷¹ See Law of the Sea, R. R Churchill A, Vaught Lowe, p.160.

⁷² Latino American and African States.

⁷³ Japan, US, URSS, etc.

⁷⁴ Ronan Long, *Course Handout, Law of the Sea*, National University of Ireland, without date, p.18.

⁷⁵ Article 2 of the Decree Law No.31/76 of 19 August 1976.

and use of artificial islands, installation and structures, maritime scientific research and protection and preservation of marine environment. Other States, coastal or land locked enjoys freedom of navigation, over flight, and of the laying of submarine cables and pipelines, and other internationally lawful actions⁷⁶.

Maritime boundaries are reviewed as a separate topic below. Nevertheless, the law establishing the EEZ of Mozambique calls for brief comment here. The first issue relates to the delimitation of the EEZ boundary with neighboring States. The distance between Mozambique and Madagascar is about 201 nautical miles in the north and 501 nautical miles in the South which means that there is an EEZ boundary overlap in the north. This situation is compounded by the dispute between France and Madagascar over The islands in the Mozambique Channel, the Europe Islands, in the centre Bassas da India of the Mozambique Channel and Mayotte Island in the North. Accordingly, it will first be necessary to resolve the status of these islands before Mozambique and Madagascar open negotiations to delimit their EEZ boundary. In addition, a further difficulty arises from the law in Madagascar (ordinance No.85-013, Determining the Limits of the Maritime Zones)⁷⁷ which provides that:

In the case where there is a distance less than 400 miles between the baseline of the Democratic republic of Madagascar and those of one or several bordering States, delimitation shall be by agreement with the States(s) concerned⁷⁸.

This clearly does not make any reference to the use of equidistant line in the process of determining the maritime boundaries with neighboring States.

Mozambique will also have to determine an EEZ boundary with the Comoros which lie in the Mozambique Channel at distance of about 147 nautical miles from Mozambique. The boundary agreement which is already in place with Tanzania takes into account the

⁷⁶ LOS Convention article 11.

⁷⁷ This ordinance revokes the previous ordinance No.73-060 of 28 September 1973.

⁷⁸ Ordinance, no.85-013, article 4.

maritime claims of the Comoros. The boundary with Tanzania in the North and South Africa in the South are less problematic as there is already an agreed boundary in the North (reviewed below) and negotiations are underway with South Africa in relation to the EEZ boundary in the South.

3. Maritime Boundaries

This part of the chapter briefly outlines some of the maritime boundary issues with neighboring States in order to provide some context to the subsequent below in Part III which addresses with ocean policy matters. Notwithstanding the fact that Mozambique has one of the longest coastlines in Africa, many of its maritime boundaries with neighboring States are not yet subject to delimitation agreements. There are many reasons for this lack of progress, including the complexity of the physical geography of the Mozambique Channel and the absence of technical expertise and resources to undertake the necessary survey work. Thus, it is unsurprising that despite a number of initiatives taken by the Government of Mozambique and with the support of the United Nations, negotiations have not commenced to date on many of the key maritime boundaries with opposite and adjacent States.

3.1 Mozambique/Tanzania

Mozambique and Tanzania have agreed land and maritime boundaries on their adjacent coasts. Both boundaries were established on 28 December 1988 and, the maritime boundary follows the course of the Rovuma River which flows into a bay. Thereafter using the equidistance method, it follows the parallel of point D which is at 10° 05' 29" S⁷⁹. This boundary lies at about 36 nautical miles from the three adjacent countries,

⁷⁹ Article IV of the Agreement between the two States reads "The delimitation of the EEZ between the two countries is delimited in conformity with the equidistance method by prolongation the median straight line used for the delimitation of the territorial sea from point "C" to point 25.5 nautical miles, located at latitude 10° 05' 29"S and longitude 41° 02' 01"E, hereinafter referred to as point "D". From this point, the EEZ is

Mozambique Tanzania and Comoros. Importantly, this boundary was drawn taking into account the spirit of friendship, solidarity and, good neighborliness that has always existed between the two States and as noted previously, also recognizes the negotiation of a future boundary delimitation agreement with the Comoros⁸⁰.

3.2 Mozambique/South Africa

Mozambique has a 472Km land boundary with South Africa and negotiations are underway regarding a territorial sea/contiguous zone boundary. One of the issues under consideration is the use of the equidistant line on the application of the data collected by South Africa and Portugal for this purpose prior to the independence of Mozambique in 1976. At the time of writing, there has been agreement to use the mean low water mark as a starting point for the determination of the maritime boundary and the equidistance line. This is another example of a good working relationship between neighboring States in the same geographical region. Both States have agreed that the boundary should start at the low water marks and not follow the land boundary as projected seawards. However, there is still considerable scope for negotiation regarding the precise point of intersection between the land and the sea boundaries.⁸¹

3.3 Mozambique/Madagascar

The determination of a maritime boundary between Mozambique and Madagascar is currently one of the most problematic law of the sea issues at the regional level. Besides the difficult technical issues that must be resolved, there are also a number of political matters which are impeding progress. Namely, these include the boundary difficulties

delimited by application of the principle of equity, by a line running due east along the parallel of point "D". The point to termination of this line will be established through exchange of notes between the United Republic of Tanzania and the People's Republic of Mozambique at the future". For a description of the maritime boundary between the two countries see Chaney, Jonathan I, and Alexander, Lewis M, *International Maritime Boundaries*, p. 900.

⁸⁰ This possibility will be elaborated upon below.

⁸¹ See Jamine.

associated with the French islands (Europa Island, Bassas da India Island, Juan da Nova Island) in the Mozambique Channel which are claimed by Madagascar, and the Mayotte Island claimed by the Comoros. Prior to the resolution of this dispute it is unlikely that Mozambique will be able to maritime boundary agreements with neighboring States in this area. There have been a number of efforts by the UN to remove the current impasse⁸². There are several possible solutions provided that the future legal status of the islands can be agreed to, including whether they remain within the possession of France or come under the sovereignty of Madagascar or they fall under the establishment of some new joint governance arrangement. As mentioned previously, there is no specific reference to use of an equidistance line in the Madagascar ordinance of 1983⁸³ as the preferred means of boundary delimitation. Moreover, because of the geographical spread of the islands that are under French possession, Mozambique and Madagascar only share a common boundary of 75 nautical miles.⁸⁴ However, the Mozambique Channel is 870 nautical miles in length⁸⁵ and it may be possible to draw equidistance lines around the islands consisting of two segments, 69 nautical miles in the North between the trijunctions with Comoros and Juan de Nova, and 15 nautical miles in the middle of the Mozambique Channel between the triconjunction with Juan the Nova and Europe Island. The first solution offers little advantage to the neighboring States as the islands would generate a considerable EEZ to the benefit of France. The second possible solution is based on Madagascar exercising sovereignty over the islands. In such an instance, both States could take the presence of the islands into consideration in achieving an equitable agreement on a common boundary in the North, center and south of the channel. In

⁸² The UN General Assembly approved two resolutions regarding this issue, the first was resolution 34/91 in the 99 plenary meeting on 12 December 1979 where the Government of France was invited to “without further delay” initiate negotiation with the Madagascar Government for the reintegration of the islands, which in the opinion of the UN were arbitrarily separated from Madagascar. It must be noted that the Council of Ministers of the Organization of African Unity at its thirty-third ordinary session, held at Monrovia from 6 to 20 July 1979 had adopted a resolution on the same issue. One year later besides the UN resolution nothing has happened, through Resolution 35/123 at 11 December 1980, the UN invites again the French Government, this time “as a matter of urgency” to undertake the negotiations provided in the previous resolution but 29 years after the first resolution and 28 after the last one those islands remain French possessions.

⁸³ However, it had been incorporated in the 1973 Ordinance, see Jane’s *Exclusive Economic Zone*, p.113.

⁸⁴ The French argument is based on the historical facts could be an object of an interesting debate if we considered that the first occupation was by the ex. Portuguese colony, and at that time Mozambique was under Portuguese domain and with the independence all the Portuguese ultramarine territories of the ex. Colonial Mozambique belong to Republic of Mozambique.

⁸⁵ Prescott, p. 46.

considering this solution it ought to be borne in mind that, for France the possession of those islands is more a political matter than a question of economic or strategic interests. The last possibility is to bring the islands under a new governance regime with a mandate from the UN and to draw a boundary between Mozambique and Madagascar taking into consideration the unique legal status of the islands.

3.4 Mozambique/Comoros

Establishing a boundary with Comoros will involve three countries: Mozambique, Tanzania and Comoros. The boundary of these three countries meet in the so-called trijunction point, this point is located at 9° 30' S and 42° 21' E, and the equidistance boundary between Comoros and Mozambique measures about 275 nautical miles from the already delimited boundary between Mozambique and Tanzania⁸⁶. The Mozambique basepoint lies along the coast from Cabo Delgado in the North, along Archipelago das Quirimbas for 110 nautical miles, past Ponta Maunhane, Ponta Uifondo and Pinda to Cabo Condicia⁸⁷. There have been a number of diplomatic initiatives taken by the Government of Mozambique to open negotiations on this matter. However, the current dispute between Comoros and France regarding the sovereignty of Mayotte Island will have a major bearing on the decision of Comoros to address this boundary with neighboring States.

⁸⁶ Prescott, p.467.

⁸⁷ See Prescott citing Geographer, p.467.

Part II

Oceans Policy and Comparative Law

Introduction

As seen above, Mozambique has a number of outstanding law of the sea issues that need to be resolved to ensure the proper and effective implementation of the LOS Convention. Apart from the maritime boundary issues which are complex, none of the others are insurmountable and it is important that Mozambique keeps abreast of international best practices regarding the management and utilisation of marine resources in areas under its jurisdiction. In this context, it is important to recall that although most coastal countries have adopted sector-specific policies to manage ocean use, such as fishing and oil and gas, maritime transport, it has only been since the early 1990s that coastal States have started introducing an integrated approach to managing ocean and coastal activities.⁸⁸ Today there is considerable support in the academic literature that integrated ocean approach is a better way to manage the ocean and its resources at global, regional and national levels.⁸⁹ Furthermore, as will be seen below, there is considerable evidence that many coastal States are now heavily committed to the adoption of integrated measures to address some of the most critical issues that needs to be addressed in modern ocean use. Accordingly, the purpose of this part of the paper is to briefly examine the concept of integration and to briefly review state practice in Canada, the United States, South Africa and Tanzania with a view to understanding recent trends in the application of this concept at a practical level. This part of the paper sets the scene for the final part which explores the most appropriate course of action for Mozambique in meeting the future challenges posed by coastal and ocean management of in sea areas under national jurisdiction.

⁸⁸ The *Ocean Policy Summit 2005 Bulletin*, p.25.

⁸⁹ Laurence Juda "Changing National Approaches to Ocean Governance: The United States of America, Canada and Australia", pag. 161-163.

1. The concept of integration

There are several different views as to what the concept of integration means. One view is that it is not a legal term but a political concept which aims to harmonize the different policies governing activities such as maritime transport, fishing, aquaculture, oil and gas extraction, use of wind and tidal power, shipbuilding, tourism and marine research, require necessary integration.⁹⁰ Traditionally, States have taken sector policy decisions in isolation without taking into account how these decisions impact on other policies. The fragmented nature of the decision makes it difficult to measure the potential impact of one set of activities on other policies or the potential conflicts that may arise. In recent year, as will be seen below, there is an increasing tendency for States to achieve integration through the adoption of a national oceans policy which set down common principles and standards for the different sector areas. In other words, the objectives, programs and measures to manage the marine environment and its resources are developed in such a way that the different objectives, programs and measures are harmonized with the ultimate aim of making them mutually consistent across the different sectors. In short, many ocean related issues are global in nature and must therefore be addressed in a holistic and integrated manner. However, in this context it is important to note that as integration is realized over time and will continue to require cooperation and coordination at different levels including Governmental, institutional, geographical, and spatial levels. In addition, integration by definition requires a continual process of reassessment of policy objectives and the adoption of a multidisciplinary approach to all ocean related matters. One particular feature of ocean use is that many of the problems encountered regarding resource use extend beyond national jurisdiction. Accordingly it is often necessary to address such matters at a regional or global level. For example, transboundary fish stocks need to manage at a regional level. This is achieved in relation to the tuna fishery in the Western Indian Ocean by the Indian Ocean Tuna Commission.

⁹⁰ R. Long, *Marine Resource*.

1.2 How does the policy process start and evolve?

One general feature in the establishment of integrated management structures is that very often the first steps are taken after the Government has made a commitment to draft a general framework aimed at harmonizing various sector such as maritime transport, fishing, energy, etc. In designing such a framework, account must be taken of the cross-cutting issues such as the maintenance of biodiversity, the protection and preservation of the marine environment, combating climate change, improving science and technology, achieving sustainable development, and putting in place strategic plans to deal with national disasters, (emergencies), poverty eradication, etc.

Different approaches have been taken by different States depending on how the political system is organized within the State. For example, this issue may be addressed by the Parliament or by the Government creating a specialized commission to deal with the adoption of a national oceans policy. This was the approach adopted by the United States. Alternatively, it is also possible to address this responsibility by tasking a specific Ministry or other specialized institution with the development of the policy for those countries which already have a national ocean plan. Very often, the challenge is how best to coordinate and coordinate all the different maritime sectors both vertically and horizontally. Countries such as the United States and Tanzania have started the process by establishing a specialized commission or working group which is responsible for the identification of the need for a national ocean plan. This work is essential as the Commission must produce recommendations on which all the subsequent work will be based. It must be borne in mind that the work of the Commission must involve all sectors directly or indirectly related with the sea. Special attention must be given to public participation, and consultation between stakeholders and decision-makers. As is evident from the consultation process followed by New Zealand and Australia, this is an issue for not only maritime experts, but must also reflect the concern of all citizens and in particular the communities who live on the coast.

The Commission must be given enough time to complete its work and after considering all the relevant elements there is usually a requirement to produce a national strategic plan which can be enacted on the basis of the recommendations. In parallel, it is important that this document must be followed by legal instruments which set down firm legal obligations. In establishing the law and the plan, it is necessary to create or identify the correct organ that will coordinate the integrated implementation of the plan of action. Once again, State practice in countries such as Australia suggests that this is best achieved by a new organ or institution which is mandated with this specific mission. Strong leadership will be required for the success of the plan. Below is a suggested draft structure of the process:



Integration is definitely the actually way to address policies. Sectorial policies are harmonized and became a multifunctional structure instead of address them isolated which have proved to be inefficiently because of not evolve connected or related matters which at end will affect the entire policy drew.

2. Regional & global initiatives

Many ocean issues have to be addressed at a regional and international level. More specifically, States must ensure that their national efforts are harmonized with regional and global initiatives. Two of the best examples of regional initiatives are the European maritime policy and, in Africa, the Agenda of African Union and of the Southern African Development Communities. At a global level, initiatives such as Johannesburg Summit on Sustainable Development, its Plan of Implementation, and Agenda 21 are all important in advancing a more holistic approach to the management of ocean affairs.⁹¹

Although the EU does not have legal competence to regulate the maritime policy of all its member States because of its limited competence in specific areas such as maritime transport, it has promoted the adoption of a maritime policy at a regional level with further integration and the adoption of maritime policies by the member States. Significantly, the European Commission's Green Paper, a European vision for the Ocean and Seas, calls upon stakeholders, the public and the European institutions to adopt an integrated approach to maritime issues with a view to promoting economic development, the quality of life in coastal regions, European leadership in maritime affairs, better governance at national, European and Global level.

Globally speaking, Agenda 21 of the United Nations Conference of Environment and Development has called for the adoption of approaches to marine management that "are integrated in content and are precautionary and anticipatory in ambit"⁹². Chapter 17 aims to improve the:

Protection of the oceans, all kinds of seas, including enclosed and semi-enclosed seas, and coastal areas as well as the protection, rational use and development of their living resources.⁹³

⁹¹ Agenda 21 is one of the documents approved during the United Nation Conference on Environment and Development, in Rio Brazil, 1992. It was signed by 179 heads of Governments; it is a blueprint for sustainable development in the 21st century, aimed at providing a high quality environment and healthy economy for all the peoples of the world.

⁹² Agenda 21, paragraph 17.1.

⁹³Ibid.

There is a specific reference to the adoption of approaches to the management of ocean affairs that are integrated in content at the national, sub regional, regional and global levels.

States have take advantage of regional and global organizations to extend their policies in order to challenge transnational marine and environment problems. These initiatives such as in the case of Agenda 21 have had a crucial impact in the national policy calling for adoption of standard commitment with the ocean issues.

2.1 Some initiatives in Africa

Ocean policy issues at time of writing are not the top priority for many African States or for regional bodies such as SADC.⁹⁴ However, it doesn't mean that these organizations and States do not care about improving the quality of the marine environment or the management of ocean resources. This is more of an acknowledgment of other more serious and basic problems present such as war, access to education, poverty eradication, food and other political and social problems. Despite the pressing nature of this reality, there are many examples of initiatives aimed at improving marine resource management including the following:

- 1993 Integrated Eastern African and Island States Conference held in Arusha;

Take into account the Agenda 21 adopted by the United Nation Conference on Environment and Development calling for local efforts to integrated environment protecting into local economic development, this meeting was the response of the Eastern

⁹⁴ Analysing the Agenda of this organ at the time of writing indicated that there was nothing directly or specially related with the Ocean Policy in its provisions.

African countries to settle down a common vision for the region addressing specific problems⁹⁵.

- 1996 Second conference of the Integrated Eastern African and Island States held in Seychelles;

Based in the results of the first conference held in Arusha, the conference agreed to make more concerted attempts to improve the situation of ICZM, including the development and implementation of a strategy for capacity building as well as the establishment of a multisectoral coordinating mechanism for ICZM in each country⁹⁶.

- 1996 Adoption of a the Protection, Management and Development of the Marine and Coastal Environment Convention in Kenya;

This Convention is a legal platform which provides a framework for the countries of Eastern Africa to cooperate and coordinate efforts in order to develop and protect programs for coastal and marine environment sustainable⁹⁷.

- 1998 Pan-African conference on Sustainable Integrated Coastal Management (PACSICOM), held in Maputo.

The aim of this Conference was to strengthen sustainable development in coastal zones and areas. It was a unique moment for all African States to review the threats against the marine and coastal environment and on the measures required to meet the complex challenges. As a result of the share of ideas it was adopt the Maputo Declaration.

As will be seen below, the main thrust is towards the development of integrated management indicatives at a local level.

At a regional level, in the case of the Eastern African States, Comoros, Kenya, Seychelles, Madagascar, Mauritians, Reunion, Somalia, and Tanzania have all participated in the United Nation Environment Programme (UNEP)⁹⁸ for the protection

⁹⁵ Lindén.O and Lundin C.G, Editors, *The Journey from Arusha to Seychelles*, October 1996, p.18.

⁹⁶ http://www.ambio.kva.se/1997/Nr4_97/jun97_5.html.

⁹⁷ http://www.unep.org/NairobiConvention/The_Convention/index.asp.

⁹⁸ UNEP is the bodies under the United Nations responsible for environmental issues at the global and regional level. Its mandate is to coordinate the development of environmental policy consensus by keeping

of the marine environment of the region. As far back as 1981, a scientific project discovered many instances of oil pollution throughout the coastal zone in the region. There was also considerable evidence of land-based pollution from fertilizers and untreated sewage. One of the positive outcomes was the subsequent adoption of a regional Convention for the protection, management and development of the marine and coastal environment, a protocol on protected areas and wild fauna and flora, and a protocol on cooperation in combating marine pollution in cases of emergency⁹⁹. These initiatives can be seen as the first tentative steps by the countries in the region to develop national policies aimed at protecting and managing their coasts.

2.2 Security and Safety

In parallel to the development of the national ocean plan, security is undoubtedly one fundamental element to be taken into account when it comes to management of ocean/coast areas. In the particular case of Mozambique, security is highlighted to justify the need to determine maritime boundaries with neighbouring States and for the implementation of the future national ocean plan. Fortunately, there is no record of any serious problems regarding the security incidents between Mozambique and its neighbour or other country in the seas. But, certainly the situation in the north of the Indian Ocean, in Somalian waters which are characterized by piracy acts, affect directly or indirectly all the countries in the Indian Ocean in particular and remain a problem.

In general, the International Maritime Organization (IMO) is the international authority in the field of maritime safety who defines the rules and provides assistance for all its members.

the global environment under review and bringing emerging issues to the attention of governments and the international community for action. Its mandate and objectives emanate from United Nations General Assembly resolution 2997 (XXVII) of 15 December 1972 and subsequent amendments adopted at UNCED in 1992. See <http://www.unep.org/resources/gov>.

⁹⁹ http://www.unep.org/NairobiConvention/The_Convention/index.asp, the Convention.

In the particular case of countries laying in the Indian Ocean on the Mozambique Channel there is no any specific and regional body to deal with maritime security, all States are subject of the IMO protection. However, the IMO has been developing a long term anti-piracy project which the aim is to foster the development of regional agreements on implementation of counter piracy measures. Africa hasn't be contemplated, yet¹⁰⁰.

The major sea security problems are, among others, terrorism, illegal fishing, piracy and armed robbery at sea against ships.

Currently, on the Indian Ocean there is a substantial increase in piracy and armed robbery at sea, especially in the Somalian waters, the largest coastline in Africa, and currently considered some one of the most dangerous waters in the world.

Presently “14 ships and more than 280 seafarers from 25 nations are being held hostage in Somalia¹⁰¹”, these acts disturb the need for freedom of navigation provided by the LOS Convention, article 87 not only in the high seas but in the maritime zones where States have rights such as innocent passage provide in the article 17 and others. Note that since the beginning these acts mostly occur in the developing countries: West Africa Nigeria 1982-1986; Malacca Strait: Indonesia prior to 1989, Singapore and Malasia; South of China Sea 1993; South America, 1998: Colombia, Venezuela, the Guianas and the Caribbean; which means that this area in the Indian Ocean is a recently new area in modern times targeted by the pirates specially after the degradation of the political situation in Somalia¹⁰².

¹⁰⁰ <http://www.imo.org/>.Piracy and armed robbery against ships. Background.

¹⁰¹ www.imo.org/facilitation/mainframe.asp?topic_id=1178, p.1. November 2008: IMO chief makes direct appeal to Security Council for Somalia piracy action.

¹⁰² <http://www.imo.org/>.Background: In 2005 it was adopted the resolution A.979 (24) by the IMO Assembly in order to stop the number of attacks took place in the coast of Somalia. Recently, because of the degradation of the situation a new resolution was adopted the resolution (A.1002 (25)) on piracy and armed robbery against ships in waters off the coast of Somalia. Among others the resolution rein-enforce the Transitional Federal of Government to take any necessary efforts against the pirates within Somalia and its coast including the guarantee of release of ships hijacked. Note that in parallel a number of other actions and important instruments had been taken by the Security Council of the United Nation including resolutions 1816(2008) and 1838 in June and October 2008 respectively. See also *Op cit, Focus on IMO*, January 2000, p, 2-5.

What can happen if these acts extend to other Indian Ocean waters? To Kenyan waters, Tanzania Madagascar even Mozambique waters along the Mozambique Channel. As was outlined above, there is no regional body which can deal with maritime security and each country individually is not strong enough to be able to control alone similar illegal acts. If IMO doesn't take immediate action in regard to this situation, it will result in serious impacts for transit of people and goods.

Currently, piracy in this area is operating between the Gulf of Aden and the Kenyan border along the Indian Ocean, but they can extend their illegal acts¹⁰³. The role of each State on the Indian Ocean, in particular as there are not capable to challenge the problem, could be to at least, contribute by reporting immediately to the IMO any illegal act in the seas which disturb the peace and security¹⁰⁴.

Save better opinion the IMO decision providing necessary instruments and reinforce bodies and other institutions to combat piracy acts recognising the lack of regional capacity to deal with the problem remains to be the best solution for the problem.

3. Comparative Law and Policy

The purpose of this section is to review developments in a number of countries that are in the process of developing national ocean policies. In addition, it should also be noted that some countries such as the United States have considerable experience in implementing both ocean policy and ICZM at a national level. The experiences of the United States and Canada, as developed countries, are compared and contrasted with two African countries: South Africa and Tanzania. Overall, the aim of this section of the paper is to examine the procedures followed and current status of the policies being implemented by these countries with a view of identifying lessons that may be applicable to the development of an integrated oceans management policy by Mozambique.

¹⁰³ The news paper: *The New York Times*, 31.10.2008, Africa.

¹⁰⁴ <http://www.imo.org/Piracy> and armed robbery against ships. Initiatives to counter piracy and armed robbery at sea.

3.1 Canada

Canada, along with Australia was one of the first States to develop an integrated approach to the management of ocean affairs in the 1990s. Prior to the development of such an approach, the Minister of Fisheries and Oceans of Canada described the national ocean policy to the Canadian parliament “as piecemeal, fragmented and scattered”¹⁰⁵ after an extensive review process which involved entities inside and outside of government.

Note that Fisheries and Oceans Canada (DFO) noted in its report that the use of Canada’s coastal zone was under pressure by numerous demands including human activities, such as waste discharges, marine mining, tourism, recreation, construction¹⁰⁶. Mitigating these demands will require immediate action, specifically with respect to the use of the ocean’s resources so as to ensure sustainability of the marine environment.

Institutionally, and strengthened by the Ocean Act¹⁰⁷, the Minister of Fisheries was tasked with the responsibility for the development of a national ocean management strategy to facilitate all Canada’s bodies: Federal, Government, provincial aboriginal organizations, coastal countries communities in public and private sector¹⁰⁸.

Taking into account this description, the Canadian Parliament enacted the Canada Ocean Act in 1996, which came into force in January 1997. This act, among other things, recognizes the maritime jurisdiction as stated in the LOS Convention: defining baselines, internal waters, the twelve nautical mile territorial sea, the twenty-four nautical mile contiguous zone, the two hundred nautical mile exclusive economic zone, the continental shelf and provides a structure for new and future ocean management initiatives.

¹⁰⁵ Ronan Long, *Marine Resource*, pág.735.

¹⁰⁶ Laurence Juda, *Op cit*, p.170.

¹⁰⁷ The Canada’s Oceans Act was assented in 18 December and entered into force on January 31, 1997. The full text provided by the Department of Justice of Canada can be found on: www.justice.gc.ca/en/o-2.4/index.html.

¹⁰⁸ *National Ocean Policy*. The basic texts from: Australia, Brazil Canada, China, Colombia, Japan, Norway, Portugal, Russian Federation, United States of America, p.61-62.

The strategy for implementing the act identified three key principles as core elements in the nascent policy: sustainable development, precautionary approach and integrated management. The principal objectives of the policy were aimed at understanding and protecting the marine environment, supporting economic opportunities and making Canada an international leader in maritime affairs.

The policy was underpinned by a number of approaches to marine resource management, namely: the ecosystem approach: promotion of an ecosystem based approach to management, promotion of progressive improvement in understanding the marine environment, sustainable development: Integration of social, economic and environment aspects, and inter-generational equity, and the implementation of the precautionary approach to the management of the marine environment.¹⁰⁹: the exploitation and management of resources in a comprehensive manner that do not compromise future generations.

To guide the right coordination and management of the policy, a legislative framework has been established which considers the ocean and coastal areas as belonging to a “system”. Specific instruments are aimed at managing human impacts with different parts of the system.

Surprisingly, one particular lesson that may be learned from Canada is that the management of Canada’s maritime affairs is still fragmented with different Ministers responsible for different aspects of the policy: agents of the Federal Government and between the Federal and Provincial Government. A number of authorities have suggested that the Government should give DFO responsibility for all matters concern with management of Canada’s oceans and urged the Minister to exercise that role proactively. There is no however effective correspondence between the expectations created and

¹⁰⁹ Laurence Juda *Op cit*, pag. 171, citing “NAFO Accord on new Conservation and Enforcement Measures” (1995), 3 Nafu News; also 1995 NAFO *Annual Report*, at 34 and 58-72.

necessary institutional changes which means that expectations are beyond the reality. There is still a lack of institution mechanisms for change.

3.2 United State of America

The United States is a major maritime power and immensely reliant on the ocean. The offshore ocean area under United States jurisdiction is larger than its total land mass. The issue of a national oceans policy was first addressed by the Commission on Marine Science, Engineering and Resources (referred to as the Stratton Commission) in 1969 in a report entitled “Our Nation and the sea. A Plan for National Action”. Some of the key recommendations suggested by the Commission in their report were as follows:

- The establishment of a new coordinated national ocean policy framework;
- The collection of cutting edge ocean science data which would then be translated into high-quality information for managers; and
- The implementation of lifelong ocean related education to create well-informed citizens with a strong stewardship ethic.

The Stratton Commission report subsequently lead to the establishment of the National Oceanic Atmospheric Administration (NOAA), a federal agency with a wide administrative and research brief into the oceans and atmosphere¹¹⁰. In addition, a number of important legal instruments were enacted namely, 1972 Coastal Zone Management¹¹¹, 1972 Marine Mammal Protection¹¹², Marine Research Protection and Sanctuaries Act¹¹³.

In 1990, the United State Commission on Ocean Policy was established to develop recommendations for a coordinated and comprehensive national ocean plan for the

¹¹⁰ Laurence Juda, *Op cit*, preamble.

¹¹¹ http://www.coastalmanagement.noaa.gov/programs/coast_div.html.

¹¹² <http://www.nmfs.noaa.gov/pr/laws/mmpa/>.

¹¹³ <http://www.epa.gov/history/topics/mprsa/index.htm>.

United States.¹¹⁴ The U.S. Commission presented over 200 recommendations in its report which was aimed at moving the nation toward a more coordinated and comprehensive ocean policy. Among others, some of the key recommendations included: the need for improved governance, the collection of sound science, the improvement of ocean related education for the future.¹¹⁵

The Commission also endorsed the following guiding principles for the policy:

- Stewardship;
- Sustainability;
- Ocean-land-Atmosphere connections;
- Ecosystem-based management;
- Preservation of marine biodiversity;
- Best available science and information;
- Participation governance understands laws and clear decisions;
- Multiple use management;
- Preservation of marine biodiversity;
- Adaptive management;
- Understandable laws and clear decisions;
- Participatory governance;
- Timeless; and
- Accountability¹¹⁶.

In addition, it was suggested that an Action Plan ought to be established including:

- The establishment of a cabinet-level Committee on Ocean Policy;
- The promotion of a greater use of market-based system for fisheries management;

¹¹⁴ The first was The Stratton Commission, chaired by Julius Stratton, the Commission, the second was created in 2001, it was chaired by retired Navy Admiral James Watkins and it was composed of representatives from the Government, military, academic and the private-sector.

¹¹⁵ *National Ocean Policy. Op cit*, p.271.

¹¹⁶ Ronán Long, *op cit*, p.734.

- The building of a global earth observation network, including integrated ocean observation;
- The development of an ocean research priorities plan and implementation strategy;
- The accession by the United States to the 1982 LOS Convention;
- The implementation of a coral reef local action strategies;
- The support a regional partnership in the Gulf of Mexico;
- The passage of NOAA Organic Act establishing NOAA within the Department of Commerce; and
- The implement the administration's National Freight Action Agenda.

The Commission observed that the new national oceans policy could be implemented if it balances ocean use with sustainability, is based on sound science and supported by excellent education, and is overseen by a coordinated system of governance with strong leadership at national and regional levels. It is clear the shift towards integrated decision-making and interagency cooperation at State and fundamental level of the Government. However, one study has concluded that the reforms are modest and do not address many of the recommendation of the Commission on Ocean Policy.

3.3 South Africa

Although few African States have developed distinctive oceans policies along the lines of Canada and the United States, some African States have considerable experience in developing integrated management for the coastal zone (referred to as ICZM). In contrast to ICZM, national ocean policies tend to be more ambitious and entail the implementation of a wider management structure for all activities that impinge directly or indirectly with the ocean. This may be compared with ICZM which is more restrictive and refers essentially to the promotion of good management along the coast.

There are some good examples of the ICZM approach to marine resource management in Africa. One such case is South Africa which has adopted a national coastal policy¹¹⁷. This commenced with an initiative of the Ministry and Department of Environmental Affairs and Tourism which is responsible for ICZM, marine pollution control and sustainable use and conservation of marine living resources¹¹⁸. In addition, this initiative had strong support from the British Department for International Development which provided generous financial support, as well as expert advice on the practical aspects of implementation¹¹⁹.

The first step was taken in 1995 with the establishment of a Policy Committee whose members were appointed by the Minister of Environmental Affairs and Tourism. This committee was responsible for the process and implementing the coastal management policy programme with the ultimate goal of establishing a coastal policy¹²⁰. In order to achieve this, the committee was involved in preparing a Green Paper which elaborated on the findings from consultations with the public and all institutions which work in the field of ocean affairs. The purpose of the Green Paper was to open a debate on key issues and challenges in coastal management¹²¹. Surprisingly, this process continued despite the considerable political change in Government that took place in South Africa during this period¹²². After the consultation process was completed, a draft White Paper was published. Essentially, this set out the broad structure for the adoption of an environment management policy which would provide an overall framework within which coastal development in the country takes place¹²³. The Policy Committee, the Department of the Environment and several specialist task teams were actively involved in formulating the

¹¹⁷ Bruce C.Glavovic, *A New Coastal Policy for South Africa*, Coastal Management, 2000, introduction, See also same author on *Coastal Sustainability-An Elusive Pursuit?: Reflections on South Africa's Coastal Policy Experience*, p118.

¹¹⁸ Bruce C.Glavovic, *Ibdi.*, p.4.

¹¹⁹ Bruce C.Glavovic, *Ibdi.*, p.4.

¹²⁰ Bruce C.Glavovic, *Ibdi.*, 264-267.

¹²¹ Bruce C.Glavovic, *Ibdi.*, 265-267 and also *Bruce Gravovic the Evolution of Coastal Management in South Africa: Why blood is thicker than water*, Bruce Gravovic, p.891-898.

¹²² Author Ocean & Coastal Management 49, *the Evolution of Coastal Management in South Africa: Why blood is thicker than water*, Bruce Gravovic, p.893.

¹²³ Source: Bruce C.Glavovic, *A New Coastal Policy for South Africa*, Coastal Management, 2000, p.267-269.

policy. The document was finalised in February and handed to the Minister by the Policy Committee on 11th March 1999. With a view to gaining widespread support for the policy it was distributed to all those whom had participated directly in the policy formulation process. As soon as it became evident that the policy had the support of all of the actors that were involved in the consultation process, the cabinet approved the policy in December 1999 and it was subsequently made public in 2000.

The White Paper has four key visions: recognising the value of the coast, facilitating sustainable coastal development, promoting co-ordinated and integrated coastal management and introducing a new style of management for coastal development.¹²⁴ The policy is based on a shared vision for the coast, this vision is a wish of all South Africans, to have one equitable use of it, achieving social development, cultural values, spiritual fulfilment and ecological integrity, share responsibility for keeping the basic of ecosystem providing benefits for the present and future generations at all levels¹²⁵.

Some of the principles highlighted in the policy include the following: the coastal environment are national asset, economic development, social equity, ecological integrity, holism, risk aversion and precaution, accountability and responsibility, duty of care, Integration and participation and cooperative governance.^{126, 127}

The policy required a number of actions to be undertaken, including the: institutional and legal development, awareness, education and training, information and projects¹²⁸.

Since its adoption, the feedback from the coastal stakeholders has been quiet positive. There has been considerable progress in achieving the four main objectives of the coastal management policy program: meaningful public participation, the promotion of scientific

¹²⁴ www.capegateway.gov.za/eng/your_gov/595/pubs/white_papers/; Cape Gateway (Government service aimed primarily at citizens of the Western Cape, providing information on local, provincial and national Government).

¹²⁵ Bruce C. Glavovic, *Ibdi.*, p.267.

¹²⁶ Selected article of the book Coastal Management, Bruce C. Gravovic, p.267.

¹²⁷ Ocean & Coastal Management 49, *Evolution of Coastal Management in South Africa: Why blood is thicker than water*, Bruce Gravovic, p.898.

¹²⁸ Bruce C. Glavovic, *Ibdi.*270.

research, the implementation of integrated management and the adoption of practical instruments for policy implementation¹²⁹. However, the challenge of implementation should be underestimated and more investment is needed in coastal management.¹³⁰

3.4 Tanzania

Tanzania and Mozambique share many similarities and as outline above have common maritime boundaries. Tanzania, much like to South Africa, has developed an integrated national coastal management strategy which is a document that provides a framework to link sectors and local Governments¹³¹. The ultimate aim is to create a partnership approach to ensure sustainable use of ocean resources. This initiative may be traced back to the work undertaken by the Tanzanian National Environment Management Council with the support of the University of Rhode Island Coastal Resources Centre and the United States Agency for International Development (USAID)¹³². As in the case of United States, South Africa, and the Europe an Community, the policy initiative commenced with a Green Paper which drew together the findings of an inter-sectoral working group which had been tasked with finding the key issues that needed to be resolved in managing Tanzania's coastal environment¹³³. In addition, the Green Paper reviewed and synthesized all available information from sources in and outside the country. The Green Paper reflected the collective views of the sectors and stakeholders on why Tanzania needed a coastal policy and what the policy should address. By 1999, all the work had been reviewed by the working group and by representatives from each of the five local coastal management programmes.

The integrated national coastal management strategy is focused on sustainable development and linking resources with people. More specifically, people will benefit if

¹²⁹ Bruce C. Glavovic, *Ibdi.*,270.

¹³⁰ Bruce C. Gravovic, *Coastal Management*, , p.268-269.

¹³¹ *National Integrated Coastal Environment Management Strategy* of United Republic of Tanzania, preamble.

¹³² *Ibid.*

¹³³ Author's analysis.

they work actively to protect and sustain the considerable resources in the coastal environment. The basic idea is to sustain coastal economic development and to grow employment opportunities for all residents. The overall goal is to implement the National Environment Policy with a view to conserving, protecting and developing the resources of Tanzania coast for present and the future generation¹³⁴.

Seven strategic objectives are to be achieved by the year 2025. These include:

- Better environment planning and integrated management;
- Promotion of environment friendly approaches to development and use of the coastal ecosystem;
- Building human and institutional capacity, and
- Providing meaningful approaches for stakeholders to engage in the policy process¹³⁵.

In addition, a senior member of Tanzania's National Environmental Council underscored the importance of addressing poverty when discussing ocean policy objectives for the future.¹³⁶ This strategy provides a framework linking sectors and local governments and creating partnerships among them to ensure sustainable use of ocean resources and a mechanism for coastal resource management and EEZ management.

This sections as shown us that there are some identical elements which can be applied for all States like the commitment and the role of the Government in taking a lead in the process of developing an ocean policy and other certain reality that may be apply for developed country: ocean policy, and developing countries: ICZM.

Depending on each specific reality, singular strategies are adapted as will see in the following section in the case of Mozambique.

¹³⁴ *National Integrated Coastal Environment Management Strategy* of United Republic of Tanzania, p.19.

¹³⁵ *Ibid.* p.19.

¹³⁶ *Ocean Policy Summit 2005 Bullet*, p.29.

PART III

Developing an Ocean policy model for Mozambique

Introduction

The purpose of the final part of this paper is to review international trends with a view to identifying some elements in a model for ocean governance for Mozambique. The proposed model is based on the best practices in both developed and developing countries. Obviously, such a model cannot identify all the precise elements in a national ocean/coastal policy. Rather the task here is to identify some common threads in international best practices with a view to meeting some of the challenges that need to be addressed by a developing States in Africa. This analysis takes into account the experience of coastal zone management in a number of areas, namely in Maputo, Gaza and Inhambane. Drawing from this experience, this part concludes by recommending the expansion of the practice of ICZM as the first step in promoting a national oceans policy.

1.1 Pilots programmes along certain coastal zones

Certain Government action which been taken in Mozambique has incorporated precaution in the process of management of the coastal areas. In 2003, it has been enacted the Decree n°5/2003 of 18 February¹³⁷ was enacted, creating the Sustainable Development Centre for the Coastal Zone Management, established in the district of Gaza province which is an institution subordinated to the Ministry of Co-ordination for the Environment Affairs. This Center's essential mandate is to coordinate and promote studies, technical assistance, capacity and development of micro environment coastal, marine and lacustrine management activities which contribute to the elaborate policies and formulate legislation that promotes the development of coastal zones.

¹³⁷ Bullentin of the Republic no.7, 1° Serie, 2° Supplement.

Some provinces have benefited from there pilots programs on the coast: Maputo, Gaza and Inhambane. These initiatives are typically address the issues by sectors, and are also the way to resolve immediate problems such as erosion¹³⁸, pollution, arrangements for tourism and to protect the biodiversity threaded because of some bad human actions and others.

The trend among the academics opinions and State practices as shown that to address the isolation of ocean/coastal issues is not the best way to deal with such problems.

U.S, Canada as developed countries, South Africa and Tanzania as developing countries, as shown in the previous chapters are some of the examples of modern governance of the ocean/coastal issues and the trend and calls of many international meetings has been for the countries develop a new plan taking into account the environmental issues and sustainable development, however this reality has begun in the earlier 70's but only recently States have assumed ocean/coastal government has a global agenda.

1.2 Analysing Integrated Coastal Zone Management and National Ocean Plan

States Practice has also shown that there are two realities that can be seen differently, one is a national ocean plan and other is an integrated coastal zone management (ICZM). The first has been developed mostly by developed countries, while developing countries have tried to develop ICZM and Africa is not an exception.

Instead of developing sector programs such as those referred above in Maputo, Gaza and Inhambane, Mozambique needs an ambitious national plan in this field, the question is which model of plan can be applied.

¹³⁸ In Mozambique erosion occur mainly in Maputo, Xai-Xai, Beira, Nacala and Pemba, and constraint in tacking these problems involve the usual combination of a lack of skilled personnel and of institutional coordination. See Bernardo Ferraz and Barry Munslow in *Sustainable Development in Mozambique*, p.131.

The desired¹³⁹ plan is similar to that of the United States of America or Canada, both developed countries, and this is the current and modern trend in the field of ocean/coastal governance. The other option is the previous stage of evolution, which are being developing by the African States: ICZM. Mozambique has to depart from to this latter one, an integrated national coastal zone management first and then, achieves the level of a national ocean plan.

ICZM is a national, complex but dynamic process which takes place holistically, where strength is given in sustainable use, development, and protection of the coastal and marine resources and it should contain continuous decision-making processes involving the integration of scales (local, regional and national), themes (land and sea) stakeholders (corporations, householders and Governments) and objectives (economic, environment and safety). It means that it is developed take into account three relevant factors: policy, institutions, and planning¹⁴⁰.

An ocean policy is a wide process focused on the governance of the ocean/coastal as a whole, ICZM is included in this huge process as an integral part of it. But, even applying this plan there is also the risk of not resolving the coastal problems because of lack of inclusion of many ocean issues which are essential for the good management of the ocean and coast. The point is that if we take into account that the national ocean plan is wider than ICZM, drafting the latter one, many elements of the first will be undoubtedly excluded.

To write early a national ocean plan will mean to burnt stages of evolutions. Even most of the countries that are being developing national ocean plan, they started to first develop an ICZM therefore, they moved to the current stage.

¹³⁹ Desire in terms of amplitude because in each case its always necessary to analyze the requirements for specific circumstances. It can't be expected that a l successful plan applied in one country can necessarily be applied in others with the same results.

¹⁴⁰ See Dwui Abada Tiwi, *In Improving Environmental Impact Assessment for Better Integrated Coastal Zone Management*, p.21, citing also Cicin-Sain and Kwecht (1998) and Vallejo (1993).

As it is known, ICZM is a recent phenomenon, customary view as started in the United States of American as a result of recommendations made by the Stratton Commission. Such as outlined the commission had emphasized and recommended to the federal Government the consolidation of the area-based coastal programs and the modification of the laws to improve coastal resource protection and sustainable use. In 1972, the Congress enacted the Coastal Zone Management Act¹⁴¹, and other relevant instruments strengthening the management capacities of coastal States of the union.

ICZM can be seen as a primary step for a wider ocean policy. Unfortunately, the degree of problems today, especially environmental issues: climate change, pollution, erosion, human pressure, over fishing, natural disasters and others requires more than simply ICZM approaches.

Except for South Africa and Tanzania, which are still in the process of developing their national ocean plans there are no records of successfully development and implementation of a national ocean plan in Africa, which means that it's a challenge for any African State, if we take into account that all existent models are based on standards and elements of developed countries.

However, countries like Colombia and Brazil have given an example for the developing countries in developing national ocean plans.

A well drafted and implemented ICZM is half way toward sound ocean governance, besides, it is better to have an integrated national coastal zone management plan working properly rather than a national ocean plan which does not work at all. Note that the idea of ICZM has also been indicated in several academics and professional workshops in Mozambique.

¹⁴¹ Clear Water Act and other federal laws were amended to provide financial, technical, and institutional support to watershed initiatives.

1.3 Who should take the lead in the Mozambique policy process?

Article 3 of the IMAF statute provides that the institution shall: “coordinate the execution of all State actions relating to sea and borders; and propose policies and strategic related with sea and borders”. Despite having the mandate any such initiative will require political commitment from the Government. In addition, a legal regime will be needed to reinforce the implementation of any approved policy. One important consideration is that IMAF itself can not approve any legislation as its mandate is strictly limited to proposals and coordination. All plans should first be approved by the Minister Council. So even in the hypothetical case, that this institution can has a lead it will stall require the approval of the Council.

The implementation should also require special consideration. Some actual practices related with territorial boundaries have shown that there is still some lack of full coordination between all institutions which deal with boundaries. For example, surprisingly the establishment of a boundary station in the borders with neighbouring States, South Africa, Swaziland or others can be accomplished without the involvement of IMAF but, with that of other institution such as Customs who also deal with boundaries issues this is unacceptable if we take into account that IMAF is the main institution for the coordination of all boundary issues in Mozambique.

1.4 Relevant elements for National Ocean Plan in Mozambique

To implement a national ocean plan in Mozambique special attention must be given to certain aspects which typically affect the country in general and the coastal zone in particular.

Some pillars issues of the national ocean plan which are commonly recommended included: Government commitment, strong leadership, specialized commission, precautionary approach, public participation, national framework, marine environment,

climate change, science and technologic, sustainable development, economic and social growth, and others, all cross-cutting topics must be involved¹⁴².

In Mozambique, because of their particularity other elements should be considered as relevant, such as:

- Poverty Eradication;
- Reinforce of sovereignty and national marine integrity;
- Protection of marine environment;
- Combat the erosion;
- The role of Mozambique in Maritime transportation in the region;
- Natural calamities;
- Enough Education;
- The role of local authority/communities;
- Financial resources;
- Week scientific research;
- Infrastructures; and
- Regional integration.

It is because of this particularity that the model for Mozambique must not be copied *ipso facto* from the developed countries as stated by some authors¹⁴³ it can however be useful to identify certain coastal management programs in developed western nations as alternative types or models, however it is misleading to think that these represent the full range of possible approaches, the best programs, or even the programmes which have greatest potential for widespread adoption in other parts of the world.

¹⁴² Authoris analysis.

¹⁴³ James K. Mitchell, *Coastal Zone Management, A Comparative Analysis of National Programs*, p. 295, 296.

There are significant differences between developed and developing countries in terms of facing certain problems, aspirations, and all operate under different constraints¹⁴⁴. Notwithstanding the elements referred to above, it is possible to examine some other crucial macro priorities that can be taken into account in Mozambique.

Analysing the Action Plan for the Reduction of Absolute Poverty in Mozambique, PARPA I¹⁴⁵, it can be recognized some important sectors which play relevant role in ocean/coastal management and in the growth of the economy in general and thus must be taken into account in the elaboration of an integrated coastal zone management policy.

2. Resources and Environment

Managing the resources is one of the elementary key issues to deal with the environment. In this section are showed the potential of Mozambican resources and sensitive areas. All of the issues are highlighted in the most important medium and long-term Governmental action plan, PARPA. The aim is to show their role in developing an ocean/coastal master plan.

These sectors are part of the strategic pillars for the development of PARPA II: Fishing, Tourism, Maritime Transportation, and Environment.

2.1 Fisheries

Coastal resources include fish stock, coral, reefs, land and beach, mangrove, forests, flora and fauna¹⁴⁶. The fishery sector in particular contributes significantly to national exports.

¹⁴⁴ James K. Mitchell, p.255, *op cit*.

¹⁴⁵ PARPA II is the governmental plan which initiates with PARPA I, during the period of 2001-2005. PARPA II reflects the continuation of the Government commitment to reduce the poverty in the country from 54% in 2003 to 45 % in 2009.

¹⁴⁶ Adapted from the study *Seasonal variation of tides currents, salinity and temperature along the coast of Mozambique*, by Candida Sete, Jafar Ruby and Verónica Dove; UNESCO (IOC) ODINAFRA CENADO National Center for Ocean Data, p.4.

After independence, fisheries were first managed by the National Directorate within the Ministry of Industry and Energy. More recently they have become part of the Ministry of Agriculture and Fisheries. The principal task of the administrative structures is to maximize the fishery resources in maritime areas under national jurisdiction¹⁴⁷.

In Mozambique, there are six types of fisheries under the Law of Fisheries¹⁴⁸:

- Subsistence fisheries;
- Artisanal fisheries;
- Semi-industrial;
- Industrial fisheries;
- Experimental and scientific fisheries; and
- Athletic and recreation fisheries

This classification of fisheries is based on the type of boat employed in the fishing operation. The most significant fisheries for the purpose of this paper are artisanal fisheries¹⁴⁹, semi-industrial, and industrial fisheries, all of which will be further elaborated upon below. The main species for the industrial and semi-industrial fisheries are Kapenda, Prawns, Tuna fish, by catch (small pelagic fish species) and deep-sea fish. With the exception of Kapenda, all the others are commercial sea fisheries¹⁵⁰. The main species for the artisanal fisheries are Fin Fish, Prawns, Sharks, Octopus/Squids and Crabs. The artisanal fishing takes place along the whole coast of Mozambique and represents an important source of cash income and food for the local communities and employs over 100,000 people directly¹⁵¹ and it is estimated that between 50,000 and

¹⁴⁷ *Mozpesca*, quarterly magazine, Ministry of Fishery of Mozambique, edition 00, 2004, p.5 and 6.

¹⁴⁸ Law of the fisheries no.3/90 September.

¹⁴⁹ The reason is because it is the main sector of fish production in Mozambique. This sector contribute substantial for PARPA (Action Plan for the Reduction of Absolute Poverty), evolve the community has an important role in supplying the internal market and can also export. See *Mozpesca*, quarterly magazine, ministry of fishery of Mozambique, edition 00, 2004, p7.

¹⁵⁰ Kapenda is a fresh water fish and it is fished in the manmade lake, Cahora Bassa Dam, in the central province of Tete.

¹⁵¹ Maria Isabel Virgilio Omar, *Overview of Fisheries Resources: Mozambique*, workshop on fisheries and aculculture in Southern Africa: Development and Management Windhoek Namibia, 21- 24 August 2006.

60,000 fishermen¹⁵². It is therefore not surprising that the percentage of employed in artisanal fishing is much higher than those that are employed in industrial or semi-industrial fishing.

Overall, the fisheries sector plays an important role in Mozambique's economy as is evident from the data presented below in table 1 which illustrates the contribution of fishing to the Gross Domestic Product. At the time of writing, it is estimated that the potential for sustainable catch is around 300,000 tons a year, and about half of that is being caught at the moment.¹⁵³ The richer fishing grounds are in the center and Northern provinces.

The fish sector is regulated by the law n°3/90 of 26 September/1990, Law of Fisheries. One interesting point to note is that the law was created ten years before the Ministry of Agriculture and Fisheries was established. The fisheries sector plays also an important role not only nationally but regionally. In some instances, fish stocks can be adversely affected by actions which are not under national control. Regionally for example, the Indian Ocean Tuna Commission (IOTC), an intergovernmental organization plays a key role in the management, conservation and optimum utilisation of the stocks¹⁵⁴. At the time of writing, Mozambique is not a member of IOTC a matter which needs to be addressed forthwith. Moreover, national the law on fisheries has been subject to criticism notwithstanding that the principal law was approved just after the adoption of the 1982 LOS Convention. Some aspects of the law are not in conformity with international law.¹⁵⁵ The other pressing issues are over-fishing and the protection of marine environment.

¹⁵² Antonio Mubango Hongwana, *Marine Science and Oceanographic in Mozambique*, see <http://www.aaas.org/international/africa/moz/hogwane.html>.

¹⁵³ Master Plan 2004.

¹⁵⁴ <http://www.iotc.org/english/info/mission.php>.

¹⁵⁵ For more details see Jamine, p.75.

2.1.1 Aquaculture

Aquaculture is a relatively new activity in Mozambique and the industry may be divided into two broad categories. Namely freshwater aquaculture and coastal aquaculture, which are each subdivided in subsistence and commercial aquaculture. There is considerable potential for the future development of the industry in light of the long coastline, the quality of the water in the coastal environment, the favorable climate (tropical and sub-tropical), the availability of maritime space, and the good market conditions for aquaculture products. Although the industry is in infancy with less than 2500 ha of land in a semi intensive system committed to aquaculture and producing about 1000 tons a year¹⁵⁶. The national strategy for the development of aquaculture has three principal objectives:

- Better supply of the fish to the internal market to address the shortage of food in the country;
- Improvement in the level of employment and an increase in the fish man yield as well as small scale producers; and
- Increase in fish production with a view to enhancing exports¹⁵⁷.

There is a general Aquaculture Regulation that defines all rights and obligations of all stakeholders.¹⁵⁸ The legislation defines specific norms and requirements for aquaculture farms and establishes procedures for licensing and parameters for each farming system. The Fish Inspection Department¹⁵⁹ is the competent authority for the control of quality standards of all fish and fisheries products including aquaculture products.

¹⁵⁶ Government of Mozambique Aquaculture Development Strategic for Mozambique 2008-2017, p.3, Ministry of Fisheries.

¹⁵⁷ *Op cit*, p.2.

¹⁵⁸ Mozambique, Decree 35/2001 of 13 November 2001.

¹⁵⁹ Note that this department is an organ within the Ministry of Fishery.

2.2 OFFSHORE OIL AND GAS

The background of exploration of hydrocarbons in Mozambique goes back long time to, when the early explorers discovered thick sedimentary basins onshore.

In general, poor technology and lack of funds made of exploring these resources very difficult.

However, regarding this issue can be said that there are four proven gas fields in Mozambique, namely: Pande, Temane, Buzi and Inhassoro.

2.2.1 Oil

Rovuma Basin

Centred on the Rovuma Delta it is located near the border between Mozambique and Tanzania. It is about 400Km long by 160 Km.

Several oil seeps have been identified in both the Mozambican and Tanzania part of the basin thus proving the presence of active systems.

Several oil seeps were sampled and analysed, showing that the oils are of natural origin, having two distinct oil types, and being Jurassic age or older¹⁶⁰.

There is only one well drilled in the Mozambican part of the basin, drilled onshore in 1986.

Mozambique Basin

2.2.2 Gas

Buzi Field

The gas potential has not been evaluated yet and gas extension areas not outlined as well due to lackage of data. Few existing seismic is very sparse, but enough to show a potential of gas at G-9 and probably G-10 horizon.

¹⁶⁰ <http://www.iotc.org/English/info/mission.php>.

Currently the National Institute of Petroleum is the institution responsible for the regulation and funding of all activities related with research, production and transportation of petroleum, as well as all the adoption of necessary policy in the field; in simple terms, the Institute manages the petroleum resources of Mozambique and administers the related operations. This Institution was established by the Decree n° 25/2004 of 20 August 2004. Three years after the establishment of the petroleum law n°3/2001 of 21 February 2001 which establishes the regime for the granting of rights for the conducting of petroleum operation in the Republic of Mozambique.

Article 23 of the Petroleum Law is particularly relevant as it relates to environmental protection and safety.

This law clearly recognize in the article 21, the law 4/96 of 4 of January law of the sea in regulating the maritime jurisdiction for any access to petroleum operations sites located in the national jurisdiction¹⁶¹.

In deed there are expectations in Mozambique regarding the discovering of oil. Note that the geology of parts of Mozambique suggests that the rocks could bear oil, and it is true that natural gas deposits are often but not always associated with oil deposits¹⁶².

2.3 Tourism

The strategic plan for tourism recognizes¹⁶³ the importance of integrated developing planning has one of the core processes that will lead to successful tourism development in Mozambique. This is an example that tourism also plays an important role in developing integrated coastal zone management. One of the initiatives of tourism in contributing for the good management of the coastal areas is the protection and conservation of those areas which are used for tourism.

¹⁶¹ Territorial Sea, Continental Shelf and Exclusive Economic Zone.

¹⁶² Exploration, *Frontier with high Expectations*, Geoexpro, March, 2006. See also on <http://stockpro.no/Msg.asp?GroupID=25&Group=Oslo+B%F8rs&TopicID=45&Topic=AGI&Keyword=AGI>.

¹⁶³ See *Strategic Plan for Development of Tourism in Mozambique* (2004-2013); *Tourism Plan*, February 2004, pag.69.

Note that irresponsible management of tourism can cause enormous damage to the environment because of bad use of the natural resources and human pressures. As a member of the International Union for Conservation of Nature, the Government has committed to protecting tourism areas¹⁶⁴.

Mozambique has the privilege to offer a diversity of beach, eco-tourism, and cultural products, the country is administratively divided in three regions, north centre and south, and this latter part of the country is where the tourism is concentrated, especially in Maputo City, Maputo Province, Gaza and Inhambane.

Taking into account this feature, since 1994 the Government of Mozambique has taken initiatives to adopt several policies and legislations concerning natural resources management, which play an important role in tourism promotion. Following legal instruments have direct relationship with the tourism sector:

- 1995 National Environmental Management Programme

The overall plan for the environment in Mozambique, containing a national environment policy, environment umbrella legislation, and an environmental strategy. It is also a program of sectoral plans, containing projections for the medium and long terms aiming to lead the country to sustainable socio-economic development.

- 1995 National Forestry and Wildlife Policy and Strategy

This policy and strategy was based on the objectives and priority stated in Article 11 of Agenda 21 of UNCED held in 1992 in Rio¹⁶⁵, the sustainable conservation and preservation of the diversity of the forestry and wildlife policy.

- Land Law 1997

¹⁶⁴ It is not surprise that to better achieve this goal in 2001 the responsibility for conservation areas was transferred to the Ministry of Agriculture. This issue is reflected in the article 9 of the Law of Tourism, Law n°4/2004 of 17 of June.

¹⁶⁵ Forest is source of timber firewood and other goods. They also play an important role in soil and water conservation, maintaining a healthy atmosphere and maintaining biological diversity of plants and animals[...]" .

The land law represents the updated view of the Government as compared the previous land law of 1979. It states the constitution, exercising, transmission and extinction of how to use the land taking into account that in Mozambique the land belongs to the State.

- 1999 Forestry and Wildlife Law.

The law establishes the main principles regarding the protection, conservation and utilisation of the forest resources and fauna in order to have a social and sustainable development of the country.¹⁶⁶

- 2003 Tourism Policy and Implementation Strategy.

This policy identifies the general principles, objectives and the target areas of Government action through a strategy which will orient the implementation of the actions in order to target the goal established in the policy¹⁶⁷.

- 2004 Tourism Law.

Among other objectives, this law provides the framework for the improvement of the social and economic development of the country by preserving and respecting the multicultural, environment and identity of the citizens¹⁶⁸.

- 1995-1999 Policy and strategic for tourism.

Among others, the policy re-defines the Strategic Zones for tourism development in order to maximize the benefits of growth in the social and economic activities of the country. It also attaches tourism development to other Government Programmes and concentrates the scarce human, material and financial resources in the areas where such resources can be better applied¹⁶⁹.

¹⁶⁶ Forestry and Wildlife Law article 2 of law no.10/99 12 July 1999, 1° serie , 4° Supplement, no. 27.

¹⁶⁷ Strategic plan for tourism development in Mozambique (2004-2013), p.10.

¹⁶⁸ Based on Article 3 of the Tourism Law.

¹⁶⁹ www.transport.gov.za/library/docs/corridm6.html.

The law approved in 2004 established the legal base for tourism activities. It is a modern law which aggregates economic and social development with the promotion and protection of the biodiversity and land and marine ecosystems.

2.4 Maritime transportation

Mozambique has the privilege of being located laying in southern of Africa with 2,700 Km coastline. This natural fact transforms the other land States dependents. On the other hand, the Mozambique Channel does function as an international route, the so-called Route of Cabo, a route for several types of ships on route to many ports of the world, ships carrying all kind of good, including oil tankers with high quantities of crude, cross ship, scientific ships and military expeditions and others.

Marine pollution¹⁷⁰, illegal acts like fishing, the there are some of the problems facing the Mozambican authorities, who are further challenged because week of capacity building.

Mozambique's natural location gives it an important role in the region as a coastal State. As it was mentioned in earlier chapters, the country has 12 nautical miles of territorial sea, in which it exercise its sovereignty, and 200 exclusive economic zone, both maritime jurisdictions claimed first by the Decree Law No. 31/76 of 19 August 1976 in the year of the independence and then later incorporated in the Law of the Sea, Law 4/96 of 4 January 1996.

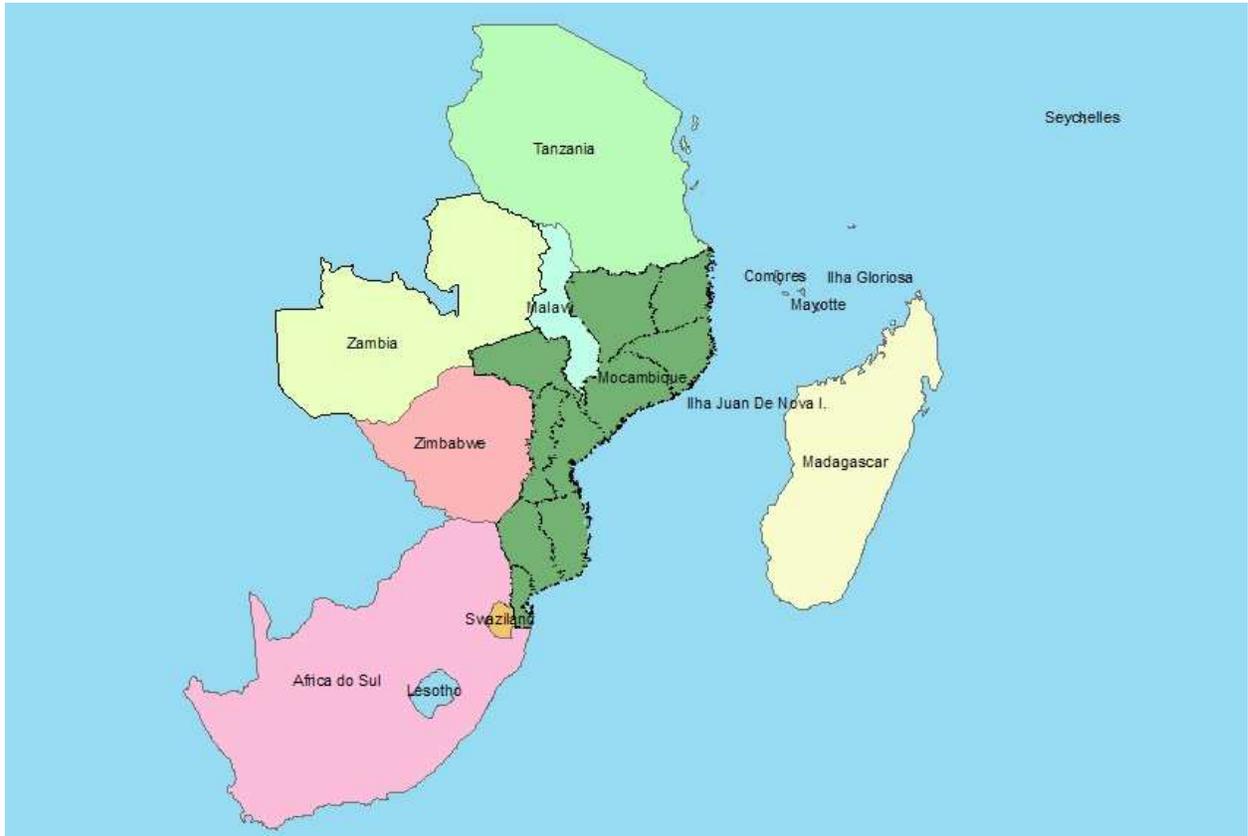
The LOS Convention prescribes that the Land-locked States shall enjoy the freedom of transit through the territory of transit States by all means of transports, article 125, n^o1 of the LOSC Convention, *in fine*.

¹⁷⁰ On 19 of April 2002 the master of the Greek-owned, Maltese-flagged vessel Katina P spelled in the Maputo Bay about 72.000 tonnes of oil and became one of the undesired natural disasters known in the navigation history. The vessel was en route from Venezuela to the Persian Gulf, had suffered structural damage during a storm. Two tankers were reported to be holed and an estimated 25,000 barrels of 6 fuel oil released.

Mozambique has important ports, which jointly with railways develop a crucial role in maritime transportation for the wider region. The ports and harbors are in the three administrative regions north Nacala, Pemba and Quelimane ports, center in Beira and south in Maputo. As land-locked States Zimbabwe, Zambia, and Malawi are among others, the biggest beneficiaries of the Mozambican ports.

Figure 3:

Some beneficiaries countries of the Mozambican ports.



Source: Figure extracted from the paper “Boundaries situation” of the Directorate Boundary at National Institute for Sea and Border Affairs.

The Beira Port is one of the famous ports in Africa; it is located on the river of Pungoe which is basically an estuary that belongs to the town of Beira in Mozambique. It is the second largest port of Mozambique and it has a historical importance that dates back to the 1890's where it played a significant role in serving the Sofala harbour. It is this no surprise that Mozambique has taken the lead of transport and communication within the Southern African Development Communities (SADC), at the of function of this regional organization.

The maritime traffic is regulated by the Decree n°35/2007 of 14 August 2007, Decree for commercial maritime transportation of goods, passengers which regulate the commercial traffic in different fields of navigation and types of exploration.

It is indubitably, a challenge for the country to balance its position as a coastal State with certain international obligations regarding the innocent passage, (article 7), (article 45) straits used for international navigation, (article 37) transit passage, or to facilitate the transit of goods and passengers, (article 125 n°1) but, at the same time has the responsibility to protect its marine areas against any illegal act including those against the environment and its resources.

2.5 Environment

All successes integrating and managing the ocean/coastal issues depends mostly on a better understanding of the environment. Although it may be very difficult, if not possible, to totally control the environment at least, some precautionary actions must be taken to minimize the negative effects on nature.

The LOS Convention in its Part XII has developed an important role calling States to protect and preserve the marine environment. This call includes global and regional cooperation, formulating and elaborating international rules, standards and recommended practices and procedures consistent with the Convention, for the protection and preservation of the marine environment¹⁷¹.

It is no surprise that at the beginning of this decade many international meetings had been held all over the world to consider this aspect of the LOS Convention.

¹⁷¹ LOS Convention articles 192 and 197.

Recognizing the significance of this issue, the Government of Mozambique has established in 1997 by the Law n°20/97 of 1 October 1997, the Ministry for the Coordination of Environment Affairs MICOA. This Ministry has responsibilities for key environmental areas, but several other environmental fields are under the mandate of other ministries¹⁷², this makes the coordinating role of MICOA crucial.

Note that environment issues are considered cross cutting topics in the PARPA, such as HIV, natural disasters (drought, floods, storms, el Niño phenomenon, erosion, due to floods, waves, winds, along shore drift) and others.

In the Mozambican environment strategy for sustainable development which was approved in July 2007 for the next five ten years, recognized, the importance at the management of the coastal, marine and island ecosystems taking into account as its vision to stimulate the productivity and sustainable utilization of the natural and environment resources, specialty the marine and coastal resources. This as a way to reduce the level of poverty, as it is known that ocean, seas, islands and coastal zones are an integrated and essential ecosystem of the earth¹⁷³.

One of the most serious lacunas of the Law of The Sea in Mozambique, Law 4/96 of 4 January 1996 is that it is relatively poor with respect to addressing environment issues.

Notwithstanding that the LOS Convention in the Part XII of the LOS Convention calls for protection and preservation of the marine environment, the law makes few regard: article 3(c) maritime policy; article 8¹⁷⁴; article 11(c) regarding the Exclusive Economic Zone; article 16(2) regarding the lay of cables and pipelines on the Continental Shelf.

¹⁷² One example was referred earlier note related with for conservation areas.

¹⁷³ See the Mozambican *Environment Strategic for Sustainable Development*, approved in the IX Session of the Ministry Council in 24 July 2007.

¹⁷⁴ Note that in the earlier chapters it had been said that the reference to protection and preserve the marine environment in the contiguous zone is not provided by the LOS Convention.

But all these stipulations are only indirectly included through other specific issues, and not included in the law as one independent chapter to strengthen the provisions of the LOS Convention and more substantial elements.

This is the unique opportunity for Mozambique to draft a model that should highlight the commitment of the country with respect to the protection of the environment: marine/coastal ecosystems, while on the other hand, pursuing a rational use of the resources for its own economic development.

One of the critical impacts on the Mozambican coast areas and particularly for the communities which live in the coastal areas, is the action of natural disasters: Tsunami, floods and other catastrophic natural phenomenon¹⁷⁵.

All coast zones constitute the occidental limits of the active zone in tropical cyclones of the southwest basin of the Indian Ocean. Each year are nine tropical storms and cyclones which is 10% of the world totally. Frequently their landfall is between Pemba and Angoche, and close to Beira.

Unfortunately, Mozambique does not have an overarching act for the management of the coastal area, such as in the case of the United States of America and its Coastal Zone Management Act of 1972.

Drafting a comprehensive and holistic ICZM policy, Mozambique must take advantage of its strategic location and assume the leadership and influence in the region in particular and in the continent in general as an African maritime nation.

¹⁷⁵ From 9 February to March 2000, Mozambique was devastated by high levels of precipitation where more than 700 people died because of floods and damage was estimated at 500 million U.S Dollars. Note the country is not new floods had occur also in the earlier years of independence: 1976 (Inkomati River), 1977 (Limpopo River), 1978 (Zambezi River). In the years 1982/83, 91/92 high dry weather was predominant. In 1984 the cycle of floods began and in 2000/1 the country suffered one of the mostly floods hadn't seen before. In 2007 the floods has reached again critical level of precipitation. Extracted from the resume of the document "*The role of the dams on floods mitigation in Mozambique*". 5° Engineer Congress Luso-Mozambican, 2° Engineer Mozambican Congress, Maputo 2-4 September 2008, Álvaro Carmo Vaz, Administrator, Consultec Lda.

Sectoral problems along the Mozambican coastal (Maputo, Gaza and Inhambane) have demonstrated in some cases there is a need for holistic plan on ocean/coastal affairs.

Developing countries are still facing the challenge of developing ICZM which appears to be more practical rather than a holistic national plan. However, State practice should not be solely a result of an analysis ICZM or ocean policy in developing and developed countries respectively it with subsequent *ipso facto* application of the former. This, as there are particular aspects of such approaches and policies that refer specially to certain countries which may not apply to others each States is unique, and each policy, while drawing on relevant experiences from abroad, must meet the specific needs of State .

Mozambique, with its long coastline appears to be in a position to develop ICZM taking also into account the diversity of its resources which need to be the subject of an integrated management approach.

The lead agency for this process will depend mainly on the level of Government commitment, for better development of the plan the body should be strengthened with enough leadership to facilitate the coordination of all national bodies which work in marine affairs.

CONCLUSIONS AND RECOMMENDATIONS

After the adoption of the 1982 LOS Convention States all over the world were invited to start a new era of use the seas established by that legal instrument which state the new modern and complex international regime for the seas.

The implementation of its principles in some cases requires a comprehensive national policy which fits with regional and international purposes. This study reviewed up relevant elements in the Mozambican maritime zones which need to be addressed in parallel with the development of an integrated ocean policy.

In Mozambique, notwithstanding the establishment of the baselines and the definition of the maritime zone which are, in general conformity with the LOS Convention, some other aspects required special consideration in the present paper.

This study demonstrated the common principles followed by State practices and the differences between developed and developing countries regarding ocean policy. Finally, an overview of the Mozambican coastal/ocean issues where demonstrating that there is evidence that ICZM is the actual trend of developing countries and Mozambique has distinctive aspects that will characterize its ocean policy. In particular, the relevant aspects include:

Baselines

- Mozambique has established its baselines in 1976 before its independence, then adopted by the subsequent domestic legislation¹⁷⁶. But, a number of important aspects have not been given enough considerations. As can be noted, the current legislation, law of the sea, Law 4/96 of 4 of January 1996, omitted the Tidal Datum used for draw the normal baselines.
- With respect to the Mozambican straight baselines there are twenty-three segments and only two of them deviate from the general direction of the coast: segment 1-2 (21°) and segment 7-8 (18°). In general, all other segments are in conformity with State practices, that is, they are less than 15°.
- Straight baselines are the system adopted in the north half of the country, however close examination in other parts of the country suggest that even in other parts along the coastline this system it can be applied.

First, in the centre of the country by closing Beira Bay, with bay closing line as prescribed by article 10 of the LOS Convention.

Secondly, in the region opposite to Inhambane province, the location of the Bazaruto National Park, close examination suggest that it could be taken into account what is prescribes in the article 7 n°1 of the LOS Convention and the same *ratio* in article 1 (f) of the Law o the Sea from Mozambique.

In the localities where the coastline is deeply indented and cut into or there is a fringe of islands along the coast in it's immediately vicinity, the method of straight baselines joining appropriate points may be employed in drawing the baselines from which the breadth of territorial sea is measure.

¹⁷⁶ Law no.4/96 January 1996; Law of the Sea article 4.

This because, in fact the region meets all the necessary requirements to apply straight baselines.

Contiguous Zone

- The Maritime zones under national jurisdiction in Mozambique are internal waters, territorial sea, contiguous zones, and exclusive economic zone. In all of them, there are rights and duties which derive from the LOS Convention, which means that States are not entitled to claim others, but to conform with those existent into the national jurisdictions.

In the case of Mozambique, it can be observed that surprisingly, marine environment prevention was expressly included as Mozambican duties in the contiguous zone. Marine environment is indubitably an important issue of ocean affairs but, States can not invoke rights or duties where the LOS Convention does not mention, such as what is prescribed in the Mozambican Law of the Sea, article 8, n°2 a) *in fine*.

Bilateral Maritime Boundaries

- One of the big issues of ocean affairs in Mozambique is the delimitation of the maritime boundaries. Note that besides being a matter of a nation security, maritime boundaries are the key issues for other aspects such as defining of the maritime jurisdiction under national control subject of this analyze, for draw an ocean policy.

The Government has to re-enforce its commitment, taking a lead in a diplomatic and technical process to negotiate with the neighboring States (Madagascar,

Comoros, South Africa) and may be with the involvement of France depending of the development of the process in the Mozambique channel.

- The United Nations instruments should be taken into consideration by the member States to avoid certain lethargy similar to France which was recalled twice by that international organization to initiate without further delay negotiation with Madagascar because of the islands in the Mozambique Channel an issue which still remains unaddressed.

Ocean Policy

- Currently, there is no holistic plan for the Mozambican coastal zone management, notwithstanding certain Governmental initiatives to mitigate the problems along the coast for example managing certain parts of it. It is highlighted the need for a wide plan for the management of oceans affairs instead of addressing the problems by sectors.

At present 29 States (including bordering the Great Lakes) and 5 territories have developed or are developed coastal management programme which together cover more than 99% of the nation's coastline¹⁷⁷.

RECOMMENDATIONS

Baselines:

- The next legislation review should take this it into account and expressly refer which Tidal Datum was used for drawing the normal baselines in Mozambique. This fact is useful for determine the precise location of the baselines.

¹⁷⁷ See Sarah Humphrey, Peter Burbidge, and Caroline Blatch, *US Lessons for Coastal Management in the European Union*, p.275.

Contiguous Zone

- It is recommended to follow what is stated in the LOS Convention extending the duties for control of archaeological and historical objects removed from seabed of the contiguous zone following the example of South Africa in claiming maritime cultural zone of the republic¹⁷⁸.

Bilateral Maritime Boundaries

- Taking advantage that the African Union has established that by 2012 all African States should conclude their borders, this call should also be take into account by all Mozambican neighbors, for reinforce their actions so as to conclude maritime boundary delimitation process.

Ocean Policy

- For the materialization of that plan, a number of steps are also needed and recommended in three dimensions: namely Institutional, Planning and Policy:
- *Institutional:*

Full Government commitment in developing integrated national coastal zone management is needed;

Close assessment of the best way to address the ocean/coastal issues, taking into account two options:

First: Create a new organ/department with a strong leadership such as NOAA, the example of United States of America or the Tanzania National Environment Management Council in Tanzania or;

¹⁷⁸ Article 6(1) of the Maritime Zones Act, No.15 of 1994.

Second: Reinforce one of the existent organs with adequate needs, human and material resources, similar to the Canada Minister of Fisheries and Ocean of Canada, Ministry and Department of Environment Affairs and Tourism in South Africa.

In both cases, a legal instrument is needed for supporting the overarching ocean/coastal plan similar to Coastal Zone Management in United States of America;

- *Planning:*

The planification should include a framework in which the process will be developed; it is a guideline of compromise for developing problem-specific policy and institutional responses for carrying out a number of options broadly similar in most countries and under different circumstances.

Here a similar wide process such as a white paper undertaken in the United States of America, the European Union, South Africa and Tanzania should be considered as an example, which also includes by having a wide public consultation.

Reasonable time is also needed for carrying out the work with in this dimension. Sometimes, political changes in the country have constituted an obstacle for the normal development of the process. South Africa is such an example where political changes occurred during the drafting of the plan in 1990, at the time of the first democratic elections.

- *Policy:*

The policy itself must be the culmination and materialization of all the contributions collected during the previous stages, it is a way to achieve the goal and not the end, integrated national coastal zone management is a continuous dynamic process that must be implemented over time and accompanied by regular monitoring.

As we are suggesting, integrated national coastal zone management is needed in Mozambique. The ideal would be a wide ocean policy but, it is recommended to follow the evolution and the capacity of the country, a national ocean plan requires a high level of scientific knowledge and consolidation of the institutions for example in terms of our understanding of nature depends largely on observations. What we are able to observe depends on the means we have to observe.

In Mozambique, research done so far in coastal waters and in open seas has been conducted by ships of opportunity, i.e, according to the availability of occasional research vessels in the region. Often these research vessels were attached to research plans of their host institutions/countries, not always compatible to the local needs. This method has made planning and systematic monitoring rather difficult¹⁷⁹.

Good experiences of the pilot activities in certain regions of the country should be used for foster a national model with the necessary adaptation of the circumstances.

¹⁷⁹ Antonio Mubango Hongwana, *op cit.*

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