

**REGIONAL SYNTHESIS REPORT ON RATIFICATION AND  
IMPLEMENTATION OF INTERNATIONAL ENVIRONMENTAL  
CONVENTIONS RELEVANT TO LAND BASED  
ACTIVITIES/SOURCES OF POLLUTION OF THE COASTAL AND  
MARINE ENVIRONMENT OF THE WIO REGION**

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## List of Abbreviations and Acronyms

CBD	Convention on Biological Diversity
CITES	Convention for International Trade in Endangered Species
COMESA	Common Market for Eastern and Central Africa
COP	Conference of Parties
DEAT	Department of Environment and Tourism (South Africa)
DWAF	Department of Water Affairs and Forestry (South Africa)
EEZ	Exclusive Economic Zone
EAC	East African Community
EIA	Environmental Impact Assessment
EMCA 1999	Environmental Management and Coordination Act (Kenya)
EMPS	Environmental Management Plan and Strategy (Seychelles)
FAO	Food and Agriculture Organization
GEF	Global Environment Facility
ICZM	Integrated Coastal Zone Management
IOC	Indian Ocean Commission
LBSA	Land Based Sources and Activities
LDC	Less Developed Countries
MARPOL	International Convention for the prevention of Pollution from Ships
MEA	Multilateral Environmental Agreement(s)
MENR	Ministry of Environment and Natural Resources (Seychelles)
MICOA	Ministry for the Co ordination of Environmental Affairs (Mozambique)
OPRC	Oil Pollution Preparedness, Response and Co operation Convention
PADH	Physical alterations and destruction of habitats
POPs	Persistent Organic Pollutants
RSP	Regional Seas Programme(s)
SADC	Southern Africa Development Cooperation
SEACAM	Secretariat for Eastern African Coastal Area Management
SIDS	Small Island developing States
SPAW	Special Protected Areas and Wildlife (Protocol)
UN	United Nations
UNDP	United Nations Development Programmes
UNEP	United Nations Environment Programme
UNCCD	United Nations Convention to Combat Desertification
UNCLOS	United Nations Convention for the Law of the Sea (1982)
UNFCCC	United Nations Framework Convention on Climate Change
UNOPS	United Nations Office for Project Services
WIO	Western Indian Ocean Region
WIO LaB	Western Indian Ocean Land Based Sources Project
WIO LaB PMU	Western Indian Ocean Land Based Project Management Unit

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## EXECUTIVE SUMMARY

This is a Nairobi Convention Regional Report on the status of ratifications and implementation of international environmental conventions relevant to Land-based Sources and Activities (LBSA) as well as on the constraints to such ratification and implementation in the Western Indian Ocean (WIO) Region. The report is one of the baseline studies undertaken as part of the project “Addressing Land-based Activities in the Western Indian Ocean (WIO-LaB)”.

This Report was intended to inform the process of developing a new Protocol on Land-based Sources and Activities (LBSA) to the Convention for the management, protection and development of the coastal and marine environment in the Eastern Africa region (in short referred to as Nairobi Convention). A study on the current status of ratification and/or implementation of LBSA-related conventions among the countries of the WIO region is deemed important for various reasons: (1) to understand the reality of the standing of international conventions in each of the countries; (2) to create a basis for assistance to the countries to help in ratification and implementation of existing instruments; and (3) to seek to overcome any constraints to the ratification and/or implementation of the proposed LBSA Protocol to the Nairobi Convention once the latter is adopted.

In the preparation and finalization of this report, the consultant worked closely with and reported to the WIO-LaB Project Management Unit (PMU), housed within the UNEP Nairobi Convention Secretariat. The Consultant received and reviewed country reports prepared by national consultants on the existing national legal, policy and regulatory frameworks relevant to land-based activities and sources affecting the marine and coastal environment. These national consultants were recruited by the WIO-LaB Project in consultation with the national focal points, and were reporting to the national focal points and National Legal and Technical Review Taskforces, which were supported by the WIO LaB Project. The latter Taskforces were responsible for validating the national reports.

The regional report was presented to the Regional Legal and Technical Review Taskforce for review and validation. The latter was established with its own TORs and structure, and necessary linkages with the WIO-LaB PMU and the National Legal and Technical Review Taskforces.

This synthesis report depended primarily on the information contained in national reports on the same subject, which were prepared simultaneously in each of the participating countries. The national studies also yielded stand-alone reports that provided details of the status of ratification and implementation in those countries; the constraints on ratification and/or implementation; and also proposed justification and type of assistance required to overcome the constraints, while linking with the on-going development of the LBSA Protocol to the Nairobi Convention.

This study finds that each of the countries of the region has ratified many of the international environmental conventions relevant to LBSA. They also have endeavoured, quite impressively, to implement the instruments by, among others, creating enabling legislation or institutions and policies or adapting existing instruments accordingly. However, it is not always apparent whether the national legal and other instruments are necessarily as a result of or in pursuance of proposed implementation of relevant international instruments.

The constraints on ratification and/or implementation of relevant international conventions, on the other hand, include: (a) the multi-sectoral and multi-faceted nature of land and limitations of international law in dealing with land *per se*, and with LBSA issues thus making it difficult to have dedicated and focused national laws, instruments, policies and other governance structures; (b) lack of or shortage of financial technical and human resources; and (c) a general lack of political will to address LBSA issues in most of the countries.

Nevertheless, it is apparent that the countries of the Region are committed to ratify and implement existing international environmental conventions relevant to LBSA, in part motivated by national needs or by external factors. They also seem determined to develop, adopt, ratify and implement the proposed new LBSA Protocol to the Nairobi Convention. To this end, the countries have proposed certain areas and needs of assistance, setting the basis for development of an assistance framework for each of the countries as a follow-up event within the Nairobi Convention Work Programme.

The challenges ahead as reflected in the recommendations of this study include the need for each of the countries to critically review their respective ratification and implementation structures and processes with a view of strengthening their capacities and making them more efficient and responsive to the needs and requirements of LBSA related international instruments, including the proposed LBSA Protocol to the Nairobi Convention. The Nairobi Convention has the challenge of providing necessary support to the countries through the establishment of a logical and sustainable framework of assistance. Such assistance should include resources to beef up institutional and technical capacities through the provision of finances, equipment and training opportunities among others; and support for review of existing or enactment of new LBSA related legislations and other instruments. Also the Convention should consider further support to the countries to effectively participate in the on-going process of development of the new LBS Protocol to the Nairobi Convention. This could be achieved through more support to the national level consultations. Part of this support by the Convention could be provided through the WIO-LaB Project.

Lastly, it is recommended that countries should consider establishing national task teams to champion the ratification and sustainable implementation of LBSA related conventions, including the proposed LBSA Protocol to the Nairobi Convention. Such task teams could be supported initially by the WIO-LaB Project, and subsequently by the Nairobi Convention Secretariat through the network of national focal points for the Nairobi Convention.

## **1.0 INTRODUCTION**

### **1.1 General Introduction**

The environmental health and well-being of oceans and seas has assumed a prominence in recent decades, attributed largely to growing scientific knowledge and understanding; the gradual demystification of the oceans and seas; increased and diversified uses of the marine waters; the actual and potential environmental risks of use; and geopolitical realities. There are broadly two main sources of marine and coastal environmental pollution and degradation, namely, land-based sources and activities, and sea-based sources and activities. The former is considered to account for most (up to 80%) of the global marine and coastal environmental degradation, with very grave consequences on biodiversity, livelihoods, economies and human societies. The impacts of human activities on the marine and coastal environment include: habitat destruction and degradation through direct activities such as land reclamation, coastal developments (mainly urbanization and tourism), dredging and inappropriate fishing practices; deterioration in the quality of habitats and of water through pollution; and damage to biological communities and living resources through non sustainable levels of harvesting (UNEP/GPA/WIOMSA 2004, UNEP 2008). The World Resources Institute 2002 reported that more than one-third of the world's coastlines is under a high degree of threat from such development-related activities.

Among the major responses to the environmental problems of marine and coastal areas is the establishment and development of appropriate legal and institutional mechanisms at the international, regional and national levels with the most prominent internationally being the United Nations Environment Programme (UNEP), and particularly its Regional Seas Programmes (RSPs), which includes the Eastern African Region covered by the Nairobi Convention encompassing five continental states and five island states in the Western Indian Ocean (WIO) Region. The establishment of the UNEP's Global Programme of Action for the protection of the marine environment from land-based activities (GPA) in 1995 was a direct response to the challenges posed by increasing marine and coastal pollution and degradation associated with land-based sources and activities. The WIO-LaB Project is building upon previous work by the organisations already mentioned and seeks to, among others, strengthen the regional legal basis for addressing land based sources and activities causing marine environmental degradation in the WIO Region.

The Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region and the Protocol concerning Protected Areas and Wild Fauna and Flora (SPAW Protocol) in the Eastern African Region and the Protocol concerning Co-operation in Combating Marine Pollution in Cases of Emergency (Emergency Protocol) in the Eastern African Region were enacted in Nairobi on 21 June 1985. The Convention and its protocols is a regional legal framework for the protection and conservation of the marine and coastal environment of the Eastern African region. The countries of the WIO Region have ratified or have yet to ratify or implement several other global instruments that are relevant to the protection of the marine and coastal environment of their respective territories, and by extension the WIO Region. The status of ratification and implementation of those conventions among the countries of the Region, as well as any constraints and assistance needs for ratification and/or implementation, are the main subject of this Report.

The Nairobi Convention Area covers the mainland countries of Somalia, Kenya, Tanzania, Mozambique and South Africa and the island states of Seychelles, Reunion (France), Madagascar, the Comoros and Mauritius. The Convention came into force in 1996 and all the

countries covered by the Convention have ratified it. Since 1999 subsequent meetings of the Conference of Parties (COPs) have called for the review of the Nairobi Convention and its protocols to bring them up to date as modern and dynamic regional legal instruments better suited for the protection and conservation of the marine and coastal environment of the WIO Region. They have in addition called for the development of a new Protocol on Land based Sources and Activities (LBSA Protocol). The call for an LBSA Protocol is a tacit acknowledgement of an existing legal gap to confront the increasing challenge and severity of land-based sources and activities causing pollution and degradation of the coastal and marine environment in the WIO Region. UNEP's Global Programme of Action on Protection of the Marine Environment from Land-Based Activities (GPA 1995) has identified nine pollutant source categories across most of the RSPs, and many of these are manifest in the WIO Region. The nine pollution nodes source categories include: municipal wastewater (MWW), heavy metals, litter, nutrients, oil, physical alterations and destruction of habitats (PADH), radioactive substances, sediments mobilization, and persistent organic pollutants (POPs) ([www.gpa.unep.org](http://www.gpa.unep.org)).

The main purpose of this report is to establish the current status of ratification and/or implementation of key LBSA relevant international environmental LBSA relevance for purposes of this study includes the subject matter covered by the concerned convention (i.e. it should be related to an aspect or more of LBSA); the geographical coverage and application (global or regional); and specific association or application to the western Indian Ocean Region countries or some of them. The status of these international instruments not only affect LBSA in the WIO Region presently, but also have implications on the process of development, finalization and eventual ratification and implementation of the LBSA Protocol to the Nairobi Convention, which was being developed within the framework of the WIO-LaB Project. In particular, the study seeks to highlight the constraints facing the countries of the region with regard to the ratification and/or implementation of the existing international environmental laws; and how the countries propose to surmount those obstacles. This would hopefully pave the way for the early and effective entry into force and implementation of the LBSA Protocol to the Nairobi Convention. An assistance framework is proposed within the parameters of the Nairobi Convention to enable or support the countries along the road to necessary ratifications and/or implementation as desirable.

### **1.1.1 Definition of Some Key Terms**

It is necessary to define some key terms as follows:

“Convention” is a formal agreement between States. The generic term “convention” is thus synonymous with the generic term “treaty”. Conventions are normally open for participation by the international community as a whole, or by a large number of states, or states identified as a region or sub region.

“Protocol” is used for an additional legal instrument that complements and adds to a convention or treaty. A protocol may be on any topic relevant to the original convention or treaty and is used either to further address something in the original treaty, address a new or emerging concern or add a procedure for the operation and enforcement of the convention or treaty, such as, for example, adding an individual complaints procedure. A protocol is “optional” or “additional” because it is not automatically binding on states that have already ratified or acceded to the original convention or treaty. States must independently ratify or accede to a protocol.

“Signature” of a convention or treaty or protocol is an act by which a state provides a preliminary endorsement of the instrument. Signing does not create a binding legal obligation but

demonstrates the concerned state's intent to examine the treaty domestically and consider ratifying it. While signing does not commit a state to ratification, it does oblige the state to refrain from acts that would defeat or undermine the treaty's objectives and purposes.

“Ratification” is an act by which a state signifies an agreement to be legally bound by the terms of a particular treaty. To ratify a treaty the state first signs it and then fulfils its own national legislative requirements. Ratification follows once the appropriate national organ of the country-Parliament, Senate, the Crown, Head of State or Government or a combination of these-follows domestic constitutional procedures and makes a formal decision to be a party to the treaty. The instrument of ratification is a formal sealed letter referring to the decision and is usually signed by the state's responsible authority and is deposited with the designated depositary under the respective convention or treaty or protocol (primarily the UN Secretary-General in New York).

“Accession” is an act by which a state signifies its agreement to be legally bound by the terms of a particular convention or treaty. It has the same legal effect as ratification, but is not preceded by an act of signature. The formal procedure for accession varies according to the national legislative requirements of the concerned state. To accede to a convention or treaty or protocol, the appropriate national organ of a State- Parliament, Senate, and the Crown, Head of State or Government or a combination of these –follows its domestic approval procedures and makes a formal decision to be a party to the convention or treaty or protocol. Then, the instrument of accession, a formal sealed letter referring to the decision and signed by the state's responsible authority, is prepared and deposited with the responsible depositary.

“Adoption” is the formal act by which the form and content of a proposed treaty text are established. Treaties negotiated within an international organization like the UN are usually adopted by a resolution of a representative organ of the organization whose membership more or less corresponds to the potential participation in the treaty in question, for example the General Assembly or conference of parties.

## **1.2 Regional Profile**

### **1.2.1 Geographical Location and Characteristics**

The WIO Region also refers to Eastern and Southern Africa region bordering the Indian Ocean (hereinafter referred to as the WIO region) The WIO Region extends from Latitude 12<sup>0</sup> to 30<sup>0</sup> S and Longitude 30<sup>0</sup> to 80<sup>0</sup> E. The region represents a large array of marine and coastal settings, ranging from small island states and large countries with extensive coastline and tropical and subtropical climates. The continental coastal states are Somalia, Kenya, Tanzania, Mozambique and South Africa and the island States are Mauritius, Comoros, Reunion (France), Seychelles, and Madagascar (see Figure 1). The region is traversed by the Equator, with Kenya astride the Equator, and its climatic conditions are generally tropical, with moderate sub-tropical conditions in South Africa.



**Figure 1: Map of the WIO region**

The mainland WIO Region has a coastal zone with an estimated surface area of 4,080, 148 sq km along a coastline of 13,041 km from Somalia to South Africa. The Island States cover a total land area of about 602 846 sq km with a coastline of 6,360 km including over 400 islands and islets (*SEACAM, Vol.1, 2001*). Largest (in terms of surface area) of the island states is Madagascar, while South Africa is most expansive on the mainland. Some of the island states, such as Comoros and Seychelles are archipelagic states in the sense that they are composed of several small islands. Seychelles, with the least landmass in the Region, has as many as 115 islands and islets.

The South African coast is about 3,000 km long extending from the border with Namibia in the west to Mozambique in the east. It links the eastern and western coasts of Africa and connects the sub continent to the Atlantic, Indian and vast Southern Oceans. As such the South African coast provides the meeting point for two of UNEP Regional Seas Programmes, namely the Abidjan Convention which governs the western side of the continent and the Nairobi Convention which covers the southern and eastern side of the country (*Glazeweski: South Africa National Legal Report 2006*). Tanzania's coastline extends 800 km from the Jasini on the border with Kenya to Ruvuma River on the border with Mozambique. The country has a massive surface area of 945,234 sq km.

Both mainland and island coastal systems exhibit important similarities in terms of ecosystems and habitats such as coral reefs, rocky shores, sea grass beds, coastal vegetation and mangrove forests (*SEACAM Vol.1, 2001*). The granitic and volcanic islands in the WIO Region exhibit a relatively high level of endemism due to their isolation, which results, among others, in Madagascar being the most endemic-rich country in Africa (*UNEP 1999, in SEACAM Vol. 2001*).

### **1.2.2 Coastal and Marine Resources.**

The main coastal and marine resources in this region include abundant fisheries, scenic and serene beauty ideal for tourism and holiday making, natural ports and harbours, mangrove forests, coral reefs, seagrass meadows, coastal forests, arable land for agriculture, sand for construction and diverse mineral resources. All the countries of the region access their fishery resources in their territorial waters and Exclusive Economic Zones (EEZ), although in many cases they lack capacity to superintend the resources found within their EEZs. Species rich coral reefs, rocky shores, sandy beaches and lagoons are some of the best endowments of nature for most of the countries in the Region, with Comoros, Madagascar and South Africa being home to endemic or rare or threatened species, as well as rare sites. All the countries in the WIO Region have significant marine protected areas (e.g. Bazaruto, Quirimbas, Cabo Delgado, Malindi-Watamu, Kisite-Mpunguti, Mafia Island). The seabed and its subsoil are not, currently, significantly understood and exploited. But it is believed that there may be some nodules of precious minerals on the seabed, and natural gas and oil in the subsoil of the continental shelf.

The region has some of the best natural ports, harbours and bays, especially on the mainland coasts of Kenya, Tanzania, Mozambique and South Africa. In addition, mangrove forests, wetlands and other coastal ecosystems provide important habitat to many endemic and rare species of animals (*SEACAM Vol.1 2001*).

### **1.2.3 Population Characteristics**

The WIO Region has a population of approximately 159 million out of which approximately 24% (38 million people) live within 100km of the coast (see Table 1). The population density varies in the region (UNEP/GPA and WIOMSA 2004b) with some countries such as Madagascar and Mozambique being sparsely populated with population density of 27 and 23 people per square kilometre respectively. Other areas such as Mauritius and Comoros are very densely populated with 581 and 315 persons per square kilometre respectively (*The Encyclopedia of Earth 2007*). Urbanization and availability of ports and harbours have attracted high concentration of population in some coastal areas (UNEP/GPA and WIOMSA 2004b). According to World Bank projections, the annual population growth rate in the region in 2005 ranges from 1.0% in Seychelles, 1.1% in South Africa, 1.8% in Tanzania, 1.9% in Mozambique, 2.1% in Comoros, 2.3% in Kenya to 2.7% in Madagascar (*World Bank 2007*).

**Table 1: Land area, population size and GDP of the Western Indian Ocean countries**

Country	Area (km <sup>2</sup> ) <sup>1</sup>	Pop. (millions) <sup>2</sup> 2007	% Coastal pop. In 2000 <sup>3</sup>			GDP 2007 (US\$ billions) <sup>4</sup>	GNI Per Capita 2007 <sup>2</sup> (US\$)	HDI <sup>5</sup> 2005	Pop. growth rate <sup>2</sup> 2007	Life expectancy <sup>2</sup> 2006
			<25km	<75km	<100km					
Comoros	2,170	0.63	100	100	100	0.45	1,150	0.561	2.0	63
Kenya	582,650	37.53	6.1	7.5	8	29.51	1,540	0.521	2.6	53
Madagascar	587,040	19.67	23.2	45	55	7.33	920	0.533	2.6	59
Mauritius	2,040	1.26	100	100	100	6.36	11,390	0.804	0.7	73
Mozambique	801,590	21.37	32.7	52.1	59	7.75	690	0.384	1.9	42
La Réunion (France)	2,517	0.76	100	100	100	4.6	6,000	-	1.4	74
Seychelles	455	0.09	100	100	100	0.73	15,450	0.843	0.5	72
Somalia	637,657	8.70	30.5	52.7	55	-	-	-	2.9	48
South Africa	1,219,912	47.6	23.4	35.9	39	277.6	9,560	0.674	0.4	51
Tanzania	945,087	40.43	13.6	17.3	21	16.18	1200	0.467	2.4	52
<b>TOTALS</b>		178.04	20.1	30.4	34.3					

Abbreviations: HDI – Human Development Index

Sources: Gossling 2006 (4) World Bank 2009 (5) UNDP Human Development Report 2006.

#### 1.2.4 Major Socio- Economic Activities in the Coastal Area.

The socio-economic characteristics of the WIO region are dictated by availability and patterns of natural resources utilization. Among the most significant coastal and marine resources are fisheries, coral reefs, mangroves and coastal terrestrial forests, seagrass beds, coastal wetlands, minerals, and agricultural land. These resources provide several uses as a result of extractive activities of subsistence and commercial value. The coastal communities depend on these resources for their livelihood particularly for acquisition of food, fuel, shelter, and income. Therefore, the condition of these resources determines the communities' social and economic status. However, the WIO countries are different in terms of marine and coastal resource endowments, size of population and economic settings.

The WIO countries are at various stages of economic growth with considerable differences in the Gross Domestic Product (GDP). Majority of the countries are classified as 'poor' by World Bank criteria. Since the GDP and GDP Per Capita estimates vary significantly from one source to another, data from UNDP has been used in this analysis. *Table 1* shows that the mainland countries have relatively higher GDP compared to the island states. On the other hand, Seychelles had the highest GDP Per Capita in 2004, followed by Mauritius, South Africa, Comoros, Kenya, Mozambique, Tanzania and Madagascar respectively (*UNDP 2007*). This implies that Seychelles, Mauritius and South Africa that have GDP Per Capita (PPP) of over US dollars 10,000 per annum are enjoying relatively higher living standards than the other countries, other factors being equal.

The Human Development Index (HDI) (*see Table 1*) also shows that Seychelles, Mauritius and South Africa have higher levels of social and economic development (*UNDP 2007*). Seychelles is leading with HDI of 0.842 followed by Mauritius with HDI of 0.80 and South Africa with HDI of 0.65. They are followed by Comoros, Madagascar, Kenya, Tanzania and Mozambique with HDI decreasing in that order. This further implies that the WIO Island States have higher human development index compared to the mainland states.

The coastal areas of the mainland countries are experiencing an influx of people and rapid expansion of economic activities. Population growth in coastal areas places heavy demands on marine resources such as sea grass, coral reef and mangrove ecosystems leading to their damage and depletion of some species. Furthermore, all WIO countries have some coastal infrastructure. A lot of coastal infrastructure is related to particular economic activities such as tourism, ports and harbours, industry, mining, and road and railway transport.

Commercial, artisanal and recreational fishing activities found in all the countries of the Region, generate incomes and employment opportunities to thousands of people directly and indirectly. For example, South African commercial fisheries is worth about R1.7 billion annually, and employs nearly 90,000 people directly and indirectly. Recreational fisheries generate over R1.3 billion in revenue annually, and employ over 131,000 people. In Seychelles, where up to 95% of all socio-economic activities and other forms of development are concentrated in the coastal plains, fisheries contribute 46% of the Gross National Product, followed closely by tourism at 46%. The export of canned tuna, fresh and frozen fish constitutes about 83% of the value of Seychelles exports of goods and about 10% of her total foreign exchange earnings. Even Seychelles' manufacturing industry is dominated by tuna processing.

The tourism sector accounts for significant foreign exchange earnings in the national economies of the region. In Kenya, the tourism sector accounts for over 15% of the foreign exchange earnings. Coastal tourism accounts for the 40% of coastal economy and provides the highest numbers in terms of direct and indirect employment in Kenya's coastal economy. In Seychelles and Mauritius, which are world famous tourist destinations, coastal tourism is well developed. Growth in the Seychelles economy is principally driven by the tourism sector, which employs about 30% of the labour force and provides more than 70% of the foreign exchange earnings. Mauritius, with tourism as one of its central pillars of the economy, experienced phenomenal growth in this sector between 1993 and 2003. Arrivals rose from 374,600 in 1993 to 702,000 in 2003, an increase of 87%. Similarly, employment in this sector rose from 16,240 in 1999 to 22,260 in 2003, an increase of 37%. South Africa, Madagascar, Tanzania and Mozambique have also very lucrative and growing coastal tourism activities.

The port, harbours and maritime transportation sector are important economic sectors in all the countries in the Region. The port towns of Mombasa in Kenya, Dar Es Salaam in Tanzania, Maputo and Beira in Mozambique, and Durban and Richards Bay in South Africa are important economic centres. In South Africa, up to 80% of port and harbour traffic goes through the two ports, opening a major gateway to world trade as South Africa is very strategically placed at the intersection of three great oceans namely Atlantic, Indian and Antarctic.

Other important sectors and activities include manufacturing and processing industries, mainly in the coastal cities of the mainland. There are also mining activities, smelting plants, oil refining and extraction of building materials in most of the major coastal cities in the WIO Region. Agriculture is predominantly in the rural areas of the coastal zones, and this is both commercial and subsistence in many cases

### **1.3 Scope of Study**

The scope of this assignment covered the review of status of ratification and/or implementation of conventions relevant to land based sources and activities responsible for pollution and/or degradation of the marine and coastal environment in the WIO Region. The review examined constraints to ratification and/or implementation, and included identification of assistance

required by countries in the WIO Region to ratify and/or implement the environmental conventions relevant to LBSA in the Region. The indicative list of conventions reviewed is given in the Table 2 below

**Table 2: List of Some Relevant International and Regional Conventions**

<b>Dates</b>	<b>Relevant International and Regional Conventions;</b>
1982	United Nations Convention on the Law of the Sea (UNCLOS)
1992	United Nations Framework Convention on Biological Diversity (CBD)
1973/78	International Convention for the Prevention of Pollution by Ships (MARPOL)
1998	Convention on Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (PIC)
2001	Convention on Persistent Organic Pollutants (POPs)
1972	Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (The London Convention)
1997	Convention on the Non Navigational Uses of International Watercourses (Watercourses)
1985	Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern Africa Region and Its two protocols on SPAW and Emergency in Cases of Oil spills)
1968/2003	African Convention on the Conservation of Nature and Natural Resources(Algiers, Maputo)
1992	UN Framework Convention on Climate Change (UNFCCC)
1994	UN Convention to Combat Desertification (UNCCD)
1989	Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal (Basel)
1991	Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes Within Africa (Bamako).

#### **1.4 Methodology**

This assignment was primarily based upon secondary sources, which relied to a large extent on documented sources such as relevant previous regional and national reports, relevant international and regional conventions, and other instruments. The national reports prepared by national consultants in each of the participating countries provided the main source of information and basis for this regional report. Libraries, relevant offices and the Internet were other sources of information and documentation.

However, other methods such as telephone meetings and conferences, correspondence, and attendance at organized or scheduled meetings were important as well. The assignment did not envisage field assignments such as travel outside the country. In this regard, communication between and within the countries, including with the WIO-LaB Project Management Unit and other necessary long distance communication was primarily through e-mail, telephone, fax or other appropriate means.

The consultant worked closely with the WIO LaB PMU in the performance of the various tasks pertaining to this assignment. In particular, the Consultant jointly with the WIO LaB PMU oversaw the preparation of various national reports including servicing of legal task force meetings. The consultant also reviewed country reports prepared by national consultants. The draft versions of the regional report were reviewed by the Regional Legal and Technical Review Taskforce.

## **1.5 Literature Review/Sources of information**

The consultant was expected to undertake a detailed review of existing relevant literature, including previous reports and studies-international, regional, and national-as well as texts of the international and regional conventions and other instruments relevant to land based sources and activities. This included all the conventions cited under section 1.3 above. The following is a summary indicative list of the materials that were reviewed.

A SEACAM 2001 report, in two volumes, detailed the successes and failures of integrated coastal zone management in Eastern Africa, including the island states, covering the period 1996-2001. The report has scientific, socio-economic, and legal and institutional perspectives, both from specific countries of the region, and from a regional dimension. Sections of the reports deal with international conventions ratified or implemented by the countries. This report is fairly recent and very relevant to the present study. The SEACAM report comprises national reports from the same eight countries that are covered in the present Project. However, the report primarily focuses on the ICZM theme and not on all LBSA relevant conventions as such. Even its regional synthesis report is not detailed on these issues at all.

UNEP/GPA 2002 only briefly mentions LBSA relevant conventions, and certainly does not discuss the status of their ratification and/or implementation in the countries that are subject of this study.

Elsewhere, UNEP 1995 includes relevant international conventions and other legal instruments in the field of environment and development, and is designed as a compilation for easy reference. While it lists some of the conventions relevant to this study, it does not comment on their status of ratification and/or implementation. It is also not specific to the WIO Region. In any case, this volume was published more than ten years ago and is certainly considerably behind the more recent developments. On its part, UNEP (2005) considerably adds value to the UNEP 1995 particularly by being more up to date, and also by the variety of the instruments included. Many of the instruments are covered in this volume. However, there is no discussion or analysis of either the status of ratification or implementation whether generally or specifically for the WIO Region.

Finally, UNEP/GPA/WIOMSA 2004 although a very recent report covering the same countries as in the present study and concerning an important category of LBSA issues-PADH-it has not covered the areas of concern herein.

## 2.0 REGIONAL SYNTHESIS: REVIEW OF STATUS OF RATIFICATION AND IMPLEMENTATION OF RELEVANT INTERNATIONAL CONVENTIONS

**Table 3: Overview of Key Conventions Relevant to LBS/A and Ratification/Accession Status in each WIO Country**

CONVENTION	KEN	TANZ	MOZ	SA	COM	MAD	MAU	SEY
1982 UNCLOS	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1997 Watercourses	No	No	Yes	Yes	No	No	No	No
1972 London	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1973/78 MARPOL	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1992 CBD	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2001 POPs	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
1998 PIC	Yes	Yes	No	Yes	No	Yes		Yes
1985 Nairobi	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1968/2003 African Nature	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1992 UNFCCC	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1994 UNCCD	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1989 Basel	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1991 Bamako	No	Yes	Yes	No	Yes	No	Yes	No

### 2.1 Consideration of Status of Ratification: Country-by-Country Basis

#### 2.1.1 Comoros

Table 4 below presents an overview of the LBSA relevant conventions to which the Comoros has committed herself. However, some of the conventions are yet to be ratified by the President, and these include the 1998 PIC.

**Table 4: Overview of Status of LBSA Relevant Conventions Signed or Ratified by Comoros**

Name of Convention	Year and Date Signed	Year and date of Ratification/accession
African Nature 1968/2003	07.12.2003	18.03.2004
1989 Basel	Not signed	31.10.1994 (accession)
1991 Bamako	26.02.2004	18.03.2004
1992 CBD	11.06.1992	29.09.1994
1972 London	N/A	N/A
1973/78 MARPOL	N/A	N/A
1985 Nairobi	22.06.1985	26.09.1994
1998 PIC	Not signed	Not ratified
2001 POPs	23.05.2001	23.02.2007
1994 UNCCD	14.10.1995	03.03.1998
1982 UNCLOS	1982	21.06. 1994
1992 UNFCCC	11.06.1992	31.10.1994
1997 Watercourses	N/A	N/A

### 2.1.2 Kenya

Summary of the LBSA relevant conventions to which Kenya is a party are presented in Table 5.

**Table 5: Overview of Status of LBSA Relevant Conventions Signed or Ratified by Kenya**

Name of Convention	Year and Date Signed	Year and date of Ratification/accession
African Nature 1968/2003	15.09.1968	15.05.1968
1989 Basel	Not signed	01.06.2000 (accession)
1991 Bamako	17.12.2003	Not yet Ratified
1992 CBD	11.06.1992	26.07.1994
1972 London	29.12.1972	07.01.1975
1973/78 MARPOL	?	12.09.1975/15.12.1992
1985 Nairobi	22.06.1985	11.09.1990
1998 PIC	11.09.1998	03.02.2005
2001 POPs	23.05.2001	24.09.2004
1994 UNCCD	14.10.1994	24.06.1997
1982 UNCLOS	1982	02.03.1989
1992 UNFCCC	12.06.1992	30.08.1994
1997 Watercourses	N/A	N/A

### 2.1.3 Madagascar

Table 6 below gives a summary of the LBSA relevant conventions to which Madagascar is a party.

**Table 6: Overview of Status of LBSA Relevant Conventions Signed or Ratified by Madagascar**

Name of Convention	Year and Date Signed	Year and date of Ratification/accession
African Nature 1968/2003	15.09.1968	02.09.1971
1989 Basel	Not signed	02.06.1999 (accession)
1991 Bamako	17.03.2004	Not yet Ratified
1992 CBD	08.06.1992	03.04.1996
1972 London	N/A	N/A
1973/78 MARPOL	N/A	N/A
1985 Nairobi	22.06.1985	26.06.1990
1998 PIC	08.12.1998	22.09.2004
2001 POPs	24.09.2001	18.11.2005
1994 UNCCD	14.10.1994	25.06.1997
1982 UNCLOS	1982	22.08.2001
1992 UNFCCC	10.06.1992	02.06.1999
1997 Watercourses	N/A	N/A

### 2.1.4 Mauritius

Mauritius is party to several conventions relevant to LBSA as summarised in Table 7 below.

**Table 7: Overview of Status of LBSA Relevant Conventions Signed or Ratified by Mauritius**

Name of Convention	Year and Date Signed	Year and date of Ratification/accession
African Nature 1968/2003	15.09.1968	Not ratified
1989 Basel	Not signed	24.11.1992 (accession)
1991 Bamako	Not signed	29.10.1992 (accession)
1992 CBD	10.06.1992	04.09.1994
1972 London	Not signed	Not yet ratified
1973/78 MARPOL	Not signed	06.04.1995 (accession)
1985 Nairobi	22.06.1985	03.07.2000
1998 PIC	Not signed	05.08.2005 (accession)
2001 POPs	23.05.2001	13.07.2004
1994 UNCCD	17.03.1995	23.01.1996
1982 UNCLOS	1982	04.11. 1994
1992 UNFCCC	10.06.1992	20.01.1994
1997 Watercourses	N/A	N/A

### 2.1.5 Mozambique

Mozambique has ratified a number of international conventions relating to environmental protection and directly or indirectly to LBSA in particular. A list of relevant conventions and their ratification status in Mozambique is provided in Table 8 below.

**Table 8: Overview of Status of LBSA Relevant Conventions Signed or Ratified by Mozambique**

Name of Convention	Year and Date Signed	Year and date of Ratification/accession
African Nature 1968/2003	Not signed	28.02.1981 (accession)
1989 Basel	Not signed	13.03.1997 (accession)
1991 Bamako	Not signed	05.02.1999
1992 CBD	12.06.1992	25.08.1995
1972 London	N/A	N/A
1973/78 MARPOL	N/A	18.02.2003
1985 Nairobi	22.06.1985	04.03.1999
1998 PIC	Not signed	31.12.2004 (accession)
2001 POPs	23.05.2001	31.10.2005
1994 UNCCD	28.09.1995	13.03.1997
1982 UNCLOS	1982	13.03.1997
1992 UNFCCC	12.06.1992	25.08.1995
1997 Watercourses	N/A	N/A

### 2.1.6 Seychelles

Seychelles has either signed or ratified numerous international conventions, including those relevant to LBSA as summarized in Table 9 below.

**Table 9: Overview of Status of LBSA Relevant Conventions Signed or Ratified by Seychelles**

Name of Convention	Year and Date Signed	Year and date of Ratification/accession
African Nature 1968/2003	Not signed	31.08.1977
1989 Basel	Not signed	11.05.1993(accession)
1991 Bamako	Not signed	Not yet acceded
1992 CBD	10.06.1992	22.09.1992
1972 London	N/A	N/A
1973/78 MARPOL	N/A	N/A
1985 Nairobi	22.06.1985	20.06.1990
1998 PIC	11.09.1998	Not ratified
2001 POPs	25.03.2002	Not ratified
1994 UNCCD	14.10.1994	26.06.1997
1982 UNCLOS	1982	16.09.1991
1992 UNFCCC	10.06.1992	22.09.1992
1997 Watercourses	N/A	N/A

### 2.1.7 South Africa

South Africa has also signed and ratified or acceded to several LBSA relevant conventions, which are summarized in Table 10 below.

**Table 10: Overview of Status of LBSA Relevant Conventions Signed or Ratified by South Africa**

Name of Convention	Year and Date Signed	Year and date of Ratification/accession
African Nature 1968/2003	Not signed	Not ratified/acceded
1989 Basel	Not signed	05.05.1994( accession)
1991 Bamako	Not signed	Not yet acceded
1992 CBD	04.06.1993	02.11.1995
1972 London	Not signed	1978 (accession).
1973/78 MARPOL	Not signed	November 1984 (accession)
1985 Nairobi	Not signed	2003 (accession)
1998 PIC	Not signed	04.09.2002 (accession)
2001 POPs	23.05.2001	04.09.2002
1994 UNCCD	09.01.1995	30.09.1997
1982 UNCLOS	1982	23.12.1997
1992 UNFCCC	15.06.1993	29.08.1997
1997 Watercourses	1997	October 1998

### 2.1.8 Tanzania

As *Table 11* below shows, Tanzania has signed and ratified or acceded to several LBSA relevant conventions, both global and regional.

**Table 11: Overview of Status of LBSA Relevant Conventions Signed or Ratified by Tanzania**

Name of Convention	Year and Date Signed	Year and date of Ratification/accession
African Nature 1968/2003	15.09.1968	07.09.1974
1989 Basel	Not signed	07.04.1993 (accession)
1991 Bamako	26.11.1991	15.02.1993
1992 CBD	12.06.1992	08.03.1996
1972 London	N/A	N/A
1973/78 MARPOL	N/A	N/A
1985 Nairobi	22.06.1985	01.03.1996
1998 PIC	11.09.1998	26.08.2002
2001 POPs	23.05.2001	30.04.2004
1994 UNCCD	14.10.1994	12.06.1997
1982 UNCLOS	1982	30.09.1985
1992 UNFCCC	12.06.1992	17.04.1996
1997 Watercourses	N/A	N/A

As indicated in Table 11 above, it can be said that the ratification of the Conventions by Tanzania is rather high. This indicates a general acceptance of international trends, and the high priority accorded to environmental management by the national leadership. This commitment is well established by the National Environmental Policy 1997 which emphasizes the need for global, regional and national efforts towards ratification and implementation of international environmental treaties and agreements (*NEMC 2009*).

Among the factors that have influenced Tanzania's decision to ratify respective MEAs are the national environmental challenges facing the country, as well as the state of institutional and legislative development. For instance, the presence of more than 1,000 tons of obsolete pesticides poorly stored across the country since 1990's contributed to the ratification of the Basel, Rotterdam and Stockholm Conventions. Further, the increased awareness of the importance of civil liability in the context of transboundary environmental risks of Genetically Modified organisms (GMOs) led to Tanzania to ratify the Cartagena Protocol on Biosafety (*NEM 2009*).

## **2.2 Consideration of Status of Implementation: Country-by-Country Basis**

### **2.2.1 Comoros**

The Comoros has made efforts to implement the various LBSA conventions, including by establishing laws, institutions and policies to facilitate implementation or enforcement. However, implementation of international instruments in the Union of the Comoros usually poses problems, even where there are institutions and laws to facilitate implementation. Some of these problems have to do with conflict of competences between the central/federal government and even parliament and the regional governments in the various islands. Another dimension of the problem is that sometimes the islands are reluctant to honour international legal commitments entered into by the central government on the basis that they are autonomous or are not part of the decision making processes in the central government. This undermines the efficacy of the international instruments (*Ahamada 2008*).

The constitutional system of the Comoros envisages the legitimacy of the international conventions in the domestic realm once the government has duly entered into the commitments, usually through the Ministry of Foreign Affairs as the one that participates in the international negotiations. There is also a problem with the official gazetting of the laws before they enter into force. It is apparent that in spite of considerable environmental degradation and pollution, the political framework is weak. Appropriate parliamentary skills both among drafters and legislators are also sometimes lacking. Parliament does not always pay due attention to serious environmental issues. There are also financial constraints on the part of the federal and regional government, which hamper implementation.

### **2.2.2 Kenya**

Kenya has continued to make efforts and progress in the implementation of the various LBSA relevant conventions to which she is party. This includes through appropriate and relevant sectoral laws, policies and institutions. For example, the implementation of the 1972 London Dumping Convention has been achieved through several sectoral laws such as the Local Government Act, The Public Health Act, The Radiation Protection Act, Petroleum Act, National Oil Corporation Act, EMCA 1999, The Maritime Zones Act, the Maritime Zones Bill 2005 and the Merchant Shipping Act No 4 of 2009, the Energy Act 2006, the Survey Act, and the National Land Policy 2009, among others. Sectoral implementation of these laws to give effect to Kenya's international obligations as defined by this convention has however been ineffective. There has not been a serious effort by Kenya to build institutional capacity of the technical and legal official working in the government agencies concerned. There is also the problem of modern equipment for the treatment of the waste in accordance with the provisions of all these statute laws and internationally acceptable standards Mbulu 2007.

Kenya does not have in place any explicit policy or specific marine legislation outlawing dumping of waste and other matter into the Indian Ocean, or indeed concerning the protection of the coastal and marine environment from pollution and degradation from LBSA or all other sources and activities. EMCA 1999 however expressly prohibits marine dumping. There is in place a National Environmental Action Plan NEAP 1993, which covers the national environment generally.

Kenya has also not implemented other terms and provisions of the 1985 Nairobi Convention relevant to conservation of coastal resources, including adequately promoting measures to prevent pollution of its coastal zone by hydrocarbons, radioactive pollutants, sewage, litter and municipal waste-water. The enactment of EMCA 1999 is a step in the right direction. However, there is need for an express integrated coastal zone management policy to compliment existing legislation. Relevant guidelines and regulations under Section 55 of EMCA 1999 have also not been enacted though plans are underway for their promulgation by NEMA.

Elsewhere, the provisions of sections 89, 90 and 91 of the EMCA 1999, Kenya's framework environmental law, are relevant to matters of hazardous waste under the 1989 Basel Convention. The operation of the said sections of EMCA 1999 in terms of actual implementation may be lacking in Kenya, owing, partly, to the fairly recent coming into effect of the EMCA 1999 and lack of adequate technical and financial resources.

The obligations imposed by the 1998 PIC have not been satisfactorily implemented in Kenya. The Convention stipulates the requirement for prior informed consent procedure for the use of certain hazardous substances. There is no specific legislation that has been enacted by Parliament

in Kenya, banning the use of the six pesticides that are forbidden or subject to prior informed consent under the Rotterdam Convention. Import and export of DDT and its use in Kenya is still rampant. The Use of Poisonous Substances Act, Chapter 247 of the laws of Kenya has also not been aligned to the provisions of the convention as per Kenya's obligations under the 1998 PIC. Relevant guidelines and regulations under EMCA 1999 have also not been promulgated though plans for their enactment are underway by NEMA. Elsewhere, under the Water Act 2002, there are Water Resources Regulations (2007), as well as on-going efforts to develop national Water Services Rules and regional/water services board based water services regulations. Several laws of Kenya require review so as to better meet the country's obligations as expressly provided under the 1998 PIC.

The implementation of the 1992 CBD has been achieved through relevant national legislation enacted for the protection of biological diversity. Such legislation includes EMCA 1999, the Water Act 2002, The Forest Act 2005, The Wildlife (Conservation and Management Act) Cap 376, and The Fisheries Act Cap 378 of the laws of Kenya, EMCA 1999 to mention but a few statutes. There is however urgent need to enact specific legislation for the protection of the coastal zone such as a Marine Living Resources Act, Marine Protected Areas Act and ICZM and LBSA specific legislation to preserve the genetic and ecological basis of the whole coastal region and more importantly to protect some specific areas of the coastal zone from extraction or damaging activities.

On its part, the implementation of the 1982 UNCLOS has been achieved partly through the enactment of EMCA 1999. Implementation of the UNCLOS will also be achieved through the enactment of the Merchant Shipping Bill 2004, which shall replace the Merchant Shipping Act Cap 389.

The implementation of the 1968 Algiers Convention (as revised Maputo 2003) has in Kenya been achieved partly through the enactment of the Water Act 2002, Forest Act 2005, and EMCA 1999. Effective implementation of the Water Act 2002 is however lacking given that entry into force of the statute is very recent.

As for the 1985 Nairobi Convention and its Protocols, this has been achieved, among others, through enactment of a framework environment law (EMCA 1999) and through other framework laws such the Water Act 2002 and the Forest Act 2005. Challenges still remain in terms of enacting the specific regulations and guidelines as envisaged under EMCA 1999.

Kenya's implementation of the obligations imposed by the 1992 UNFCCC is rather wanting. Kenya is yet to prepare a national inventory on greenhouse gas emissions and has not taken proactive action to remove the said green gases through enactment of relevant legislation on prevention of atmospheric pollution. The criteria and procedure for measurement of air quality standards is also lacking. NEMA has also recommended the enactment of an Atmospheric Pollution Prevention Act in accordance with Kenya's obligations under the Convention Mbulu 2007.

### **2.2.3 Madagascar**

Madagascar has also worked towards implementation of the various LBSA relevant provisions to which she is a party. However, there are several constraints, including the delay in ratification or non-ratification of Conventions. Key issues in this regard include lack of political goodwill, institutional capacities for implementation, and political problems for some of the years over the

past 1-2 decades. The other constraints concern material, financial and human resources and capacities. There is an appreciable lack of the said resources, especially when weighed against the environmental demands of the terrestrial areas of the vast Madagascar. Marine and coastal environmental issues are not always given adequate priority. There is also weakness with regard to the material and other capacities for the focal points and those who have to communicate with the various Convention Secretariats or coordination units.

Other challenges include, with regard to ratification of conventions, lack of or low financial and technical assistance from the Convention secretariats, especially to facilitate participation in the negotiation and development of new international conventions. It is always easier for a country to ratify and implement a convention she has participated in developing.

Among the policy and legal responses in Madagascar include the Strategic Document for the Reduction of Poverty and the Constitution, which, in its preamble, acknowledges the immense value of the natural environmental resources found in Madagascar Andrianasolonjanahary 2006.

The challenges to ratification and implementation also manifest themselves equally by the designation of the different focal points for the different international and regional Conventions. This makes coordination and follow up difficult. It also makes it very expensive to establish national focal points, or even regular contact with the relevant convention secretariats.

#### **2.2.4 Mauritius**

Mauritius is doing satisfactorily in adopting international Conventions relating directly or indirectly to LBSA. The greater challenge lies in domesticating the conventions into its national laws, its coordination and implementation of these international obligations. The Mauritian legislations controlling pollution from land-based sources and activities are scattered in numerous pieces of legislations Jugessur-Manna 2007.

The country has no specific legislation which is enacted and dealing particularly or directly with LBSA except for the Merchant Shipping (Marine Pollution) Bill 2004 and the Maritime Zones Act 2005 which deal with the marine pollution mostly from the sea. The Merchant Shipping (Marine Pollution) Bill is modelled on the 1973/78 MARPOL and the 1972 London.

The Environment Protection Act 2002 prohibits the release, into the coastal and maritime zones of any pollutant, waste or other noxious substance from or through, the atmosphere, or by dumping except if the pollutant is within the level and amount permissible under an international agreement or convention to which the state of Mauritius is a party. According to the Maritime Zone Act 2005, maritime zone includes the archipelagic waters, contiguous zone, continental shelf, EEZ, historical waters, internal waters, maritime, cultural zone and territorial sea. The Minister of Environment has the responsibility of making regulations for the implementation of obligations under international and regional conventions and agreements for the protection of the coastal and maritime zone.

*A set of standards have been prescribed to control LBSA namely:*

- (1) The Environment Protection (Effluent Limitations for the Sugar Industry) Regulations 1997 (GN 34/1997) sets up the standards to effluent limitations for the Sugar Industry into a river, stream, spring, canal, reservoir, lake or underground by a sugar factory

- (2) The Environment Protection (Standards for Hazardous Wastes) Regulations 2001 (GN 1571 2001) prohibits disposal of hazardous waste at any place except at a disposal site and set up prescribed standards for containers or package of hazardous waste
- (3) The Environment Protection (Standard for Effluent Discharge) Regulation 2005 (GN 44/03) set up a list of parameters for each industrial activity and the effluent discharge standards to be complied with, while discharging those effluents
- (4) The Environment Protection (Standard for Effluent Discharge into the ocean) Regulations 2003 (GN 43/2003) set up the permissible limit or range of parameters of effluent to be discharged into the ocean. All treated effluent shall be discharged at a distance more than 300 metres off the reef barrier and at a depth more than 30 metres where there is a lagoon or at a distance more than 500 metres from the high water mark and at a depth of more than 25 metres where there is no lagoon. The Regulations prohibit the discharge of effluent into the ocean at a point where sea currents will cause the effluent to be taken back into the lagoon
- (5) The Environment Protection (Effluent Discharge Permit) Regulations 2003 (GN 43/2003) set up a list of activities requiring an Effluent Discharge Permit. The Regulations prohibit any person to discharge any effluent from any of the activities listed into a water course, water body, or onto any land unless he has an Effluent Discharge Permit from the Ministry responsible for waste water.

### 2.2.5 Mozambique

Mozambique has also taken steps to implement its various LBSA relevant conventions. However, many of the enabling national laws and regulations are still in process of enactment and some of them are still in discussion stage, involving different stakeholders such as private sector, civil society organizations, local communities, and others Mazivila 2007.

Mozambique ratified the *1989 Basel Convention* and the *1991 Bamako Convention* in 1996, by the Resolution No. 19/96, of 26 November, 1996. As part of the implementation of these conventions, country started the implementation of a project aiming at preventing industrial pollution through introduction of sound management principles, including technology transfer. The establishment of partnerships with the private sector was also one of the strategies adopted by the Government in this direction. Other activities included development of legislation and training, including contribution for the establishment of the Regional Training Centres established under the Basel Convention.

Within the framework of the execution of the above Conventions, programs were put into motion for recollecting and re-exporting from the country obsolete pesticides. At present, Mozambique is in process of implementing a National Hazardous Wastes Management System, including the establishing a Hazardous Wastes (HZW) treatment and disposal facility.

It has become clear that in order to regulate the various waste management issues, it is necessary to develop a national regulatory framework in order to ensure that at the national and territorial level, the definition and regulation of waste, including management, treatment, handling, transport, storage, recycling, disposal, etc., is consistent and coordinated.

The government also initiated a project in 1999 called Integrated Industrial Pollution Prevention (IIPP), as part of the implementation of the 1989 Basel Convention. In principle, Phase 1 of the project has been completed. Technical guidelines on transport, storage, labelling and others related to hazardous wastes are in place. A hazardous wastes landfill was constructed respecting

all international standards and soon will start to operate. The government continues to enforce the various obligations under the convention such as having in place and applying all procedures during export of HZW. Various awareness and information documents were prepared and passed to the industries.

After the ratification of the 1994 UNCCD, the Ministry for Coordination of Environmental Affairs (MICOA), led the set up of the National Coordinating Body (NCB), to ensure the existence of a structure for the implementation of the Convention.

The NCB undertook the identification of the areas affected by drought and/or under risk of desertification, followed by many other activities such as preliminary consultative meetings with various stakeholders, inventories, awareness raising campaigns, and implementation of pilot projects. With UNEP's assistance, the NCB developed a National Desertification Fund to contribute to the mobilization of financial resources from different sources, and channel the resources to support local desertification and drought mitigation activities. Later the process was amalgamated with the National Environmental Fund, which has the same objectives. Within the National Action Plan (NAP) document, the main objective is to establish a number of activities within the affected areas in collaboration with the local communities. Some of the areas to be covered include the coastal zone.

Mozambique has also sought to implement the 1992 CBD. On forestry biodiversity, government has approved the Regulations on Forest and Wild life (June 2002) which set out the guidelines, terms and conditions for sustainable use of forestry and wildlife resources in Mozambique. These regulations stress the need for benefit sharing among the community and the permit holders and it is mandatory that the communities are consulted and involved in the permit application process. Moreover, in July 2003, the Council of Ministers approved the Strategy and the Action Plan for Conservation and Sustainable Use of the Biological Diversity in Mozambique. The strategy set out the guiding principles for the conservation and sustainable use of the biological resources, through enhancement of control measures, change of attitudes and promotion of sustainable practices related to use of biological resources. The strategy states goals to be achieved in 10 years. The strategy focuses on the biological conservation, the rehabilitation and strengthening for the conservation areas and fragile ecosystems. Additionally, it also stresses the need for capacity building, enhancement of inter-institutional coordination, protection of the biodiversity and the control of invasive species.

Concerning implementation of the CBD and *1985 Nairobi Convention* and its protocols, at central and local levels, inter-institutional technical committees have been set up for the management of country's coast related issues. Programs were also implemented for the integrated management of the coastal area in those areas considered as being of priority.

The National Unit of Biological Diversity was created in 2001, with the objective of performing activities related to the conservation of biodiversity at the national level. This institution based in MICOA performed a fundamental role in the creation of the Strategy and Action Plan for Conservation of the Biological Diversity. This strategy is a basic instrument elaborated with the objective of supporting government institutions, non governmental institutions, and civil society in general, to ensure that every plan and governmental policies related to biodiversity conservation and development are done, mainly through actions that aim at coordinating policies, programs and relevant sectoral strategies.

In the context of the SPAW Protocol to the 1985 Nairobi Convention, in 2003 Mozambique established a new Marine Protected Area (MPA) in the Quirimbas, Cabo Delgado, and expanded an old one -Bazaruto National Park. The latter is now the largest MPA in the WIO region. Studies are going on in order to identify other areas with potential interest in terms of biodiversity conservation.

A national coastal zone management policy and strategy are in the final stages of preparation (Mazivila 2007). These documents are intended to enable the country to establish a national framework for integrated coastal zone management. However, the existing legislation is not sufficient to ensure sustainable development in the coastal zone, and furthermore there is a problem of lack of awareness of existing legislation at all levels of the society. Existing legislation applicable to coastal zone management issues is often outdated or presented as relevant articles within the framework of other legal instruments. In order to address these and other problems, in 2003 the government decided to create a Centre for Sustainable Development of Coastal Zones attached to MICOA (Mazivila 2007).

### **2.2.6 Seychelles**

The Seychelles has also made efforts towards the implementation of the various LBSA relevant conventions to which she is party. As part of the implementation of the 1968 Algiers Convention and the 1992 CBD, the Seychelles has undertaken the production of tools and instruments that are required under the conventions. A Biodiversity Assessment was undertaken in 1997 with a view of gathering existing information on the status and trends of the Seychelles' species, genetic materials, habitats and landscapes, the status of current conservation and use mechanisms and on the economic costs and benefits involved.

Subsequently the National Biodiversity Strategy and Action Plan (NBSAP) were prepared in 1997, as a 5 year strategy (1997-2003), pursuant to Article 6 of the 1992 CBD that requires all contracting Parties to "develop national strategies, plans or programs for the conservation and sustainable use of biological diversity". Issues common to both the NBSAP and the Environmental Management Plan and Strategy (EMPS) include sustainable management of marine resources including coral reefs as well as capacity building for assessing, monitoring and forecasting. The NBSAP, however, needs to be updated, possibly as part of a review of the EMPS. A NBSAP add-on is currently in the process of development with support from UNEP (Carolus 2007).

Other initiatives undertaken to implement the 1992 CBD include the National Plant Conservation Strategy prepared by the government in collaboration with a non governmental organization and the Institutional and Policy Analysis that was undertaken for the PDF-B Biodiversity Project, which highlighted the key issues that have been identified in previous studies regarding the implementation of the CBD.

With regard to the 1994 UNCCD, though Seychelles does not experience desertification, it seeks to implement the Convention in relation to sustainable land management. It prepared its first national report in 2004 in pursuance of the requirements of the Convention. Plans and policies have been developed within the framework of sustainable development in relation to the 1994 UNCCD. The EMPS 2000-2010 addresses sustainable development and aims to treat all development issues closely linked with the physical and living components of the environment to ensure sustainability. Several support programmes chosen in the EMPS relate to main thematic areas pertaining to the 1994 UNCCD and these include Land Use and Coastal Zone

Management; Integrated Forest Protection and Sustainable Agriculture and Energy and Renewable Energy.

The Seychelles has also sought to implement the 1992 UNFCCC and its Kyoto Protocol. It prepared its Initial National Communications in October 2000 as required by the Convention. The document focuses on inventories of sources and sinks of greenhouse gases; technologies and measures for mitigation; vulnerability and adaptation options and capacity building needs and priorities.

The country has secured funding to prepare the second National Communications. In order to implement the Kyoto Protocol and its amendments, Seychelles prepared its Refrigerant Management Plan in 1997. Furthermore, the Environment Protection (Ozone) Regulations and the Trades Tax (Prescribed Goods) Notice were enacted in 2000 to give effect to the Protocol.

The 1989 Basel Convention has been implemented into domestic law through policies, legislation and guidelines, including the EMPS 1990-2000 and, the EMPS 2000-2010, which focuses on waste management (including hazardous wastes) as one of its thematic areas. The main legislation giving effect to the 1989 Basel Convention is the Environmental Protection Act (EPA) 1994. The Act provides for the prevention, control and abatement of environmental pollution. Under the Act no person is allowed to discharge or place in to the ground or dispose in the subsoil or dig into the ground any polluting or hazardous substance or waste or throw, deposit or place any polluting, or hazardous substance or waste in any watercourse or in the territorial waters without authorisation.

Furthermore, no person is allowed to release or cause to be released into the coastal zone, polluting or hazardous substances by dumping or through the atmosphere. Section 12 of the Act provides specifically for the management of waste, including setting standards for the classification and analysis of wastes and on the standard treatment and disposal methods and regulations on the introduction, production, possession, handling and storage, transportation, segregation and disposal of hazardous waste. No person is allowed to dispose of any hazardous waste except with an authorisation. Transport within and through Seychelles, as well as, the export of hazardous waste is also regulated. The import of any hazardous waste into Seychelles is prohibited. To transport hazardous waste within or through Seychelles or export hazardous waste to any country requires authorisation. Section 14 of the Act provides for the management of hazardous substances. The management of hazardous waste is further dealt with under Part IV of the EPA and the Environment Protection (Impact Assessment) Regulations.

With regard to the 1998 PIC, though not ratified, two legislations take into consideration certain requirements of the Convention: The EPA 1994 and the Pesticides Act. With regard to the 2001 POPs, the country is in the process of ratification. However, two projects are underway to implement the Convention.. The first one is called “Enabling Activities to Facilitate early Action on the Implementation of the Stockholm Convention on POPs” funded by UNIDO, which is already underway since 2002. The overall objective of the project is to strengthen national capacity and capability to prepare a National Implementation Plan (NIP) for the management of POPs. The NIP will provide a basic and essential level of information to enable policy and strategic decisions to be made and identify priority activities that Seychelles should undertake in order to meet the requirements of the Convention.

The second project underway is “Capacity Building for Environmentally Sound Management of Chemicals especially POPs”. The outcomes of the project are expected as follows: strengthened

institutional and human resource capacity for the management of POPs; strengthened policy and regulatory framework to facilitate environmentally sound management of POPs and other chemicals and raised public awareness in importation, handling, use, and disposal of POPs and chemicals in general.

### **2.2.7 South Africa**

South Africa has made commendable efforts to implement the conventions related to LBSA as the following discussion will show. The Dumping at Sea Control Act 73 of 1980 is largely modelled on the 1972 London Convention. The Act imposes criminal sanctions for dumping substances listed in Schedule 1 to the Act, or dumping Schedule 2 or other substances into the sea without a special or general permit respectively. The permit requirements are set out in regulations made under the Act (General regulations GN R1135 in Government Gazette No. 11348 dated 17 June 1988. The pollution control division within MCM in the DEAT is responsible for implementing the Act. However, there is inadequate capacity and resources to ensure that enforcement and compliance monitoring is adequately carried out. As regards compliance, there is anecdotal evidence that designated dump sites are not adequately monitored, to check for example, whether cumulative effects of years of dumping are not reaching intolerable limits (Glazeweski 2006).

As regards implementation of the 1992 CBD, The Biodiversity Act No 10 was promulgated in June 2004 as part of *National Environmental Management* and most of its provisions came into force on 1 September of that year. The Act was motivated by and gives effect to the 1992 CBD.

### **2.2.8 Tanzania**

The ratification of the various conventions reflects the commitment of Tanzania to the implementation of the conventions. However, during the national ratification process, there is inadequate focus on assessment of financial implications of such ratification and projections in resource requirements in order for the country to meet specific obligations under the convention. The lack of financial commitment right from the national ratification process of MEAs does contribute to difficulties in their implementation due to many competing development needs in relation to the meagre resources available (NEMC 2009).

Tanzania has made appreciable efforts to implement the conventions to which she is a contracting party. Such efforts include the improvement of the legislative framework for environmental management; the mainstreaming of MEAs into national development strategies and plans; The legislative framework for environmental management has been improved to provide for broad participation of stakeholders and for their enhanced coordination, paving way for improved environmental management. The Environmental Management Act (Cap 191) of 2004 provides for broad participation of all stakeholders at all levels of government from Local Government Authorities to sector ministries. A number of regulations have been promulgated to facilitate coordination, sound environmental planning and the implementation of the Act. Such regulations include EIA Regulations of 2006. There are other regulations that are in the process of being finalized and these include draft Solid Waste Management Regulations; and draft Hazardous Waste Management Regulations.

Other important steps towards implementation of LBSA relevant conventions include the formulation of Guidelines for Mainstreaming Environment into Sector and Local Government Authorities' Plans and Budgets in 2008, under the Office of the Vice President. The Guidelines

cover key elements of the mainstreaming thrust that include continuing public awareness-raising about environment and natural resources issues, participatory planning, recognizing the cross-sectoral nature of environment and capacity building. The Vice President's Office has established Environment Working Group (EWG) since 2004, which constitutes members from sector ministries, Local Government Authorities, NGOs, private sector and development partners. The EWG is tasked to improve consensus amongst environmental stakeholders; and to coordinate with development partners who were increasingly expressing varied interests on environmental issues. The EWG promotes environmental integration in development policies and plans and has proven effective, offering an opportunity for working together, finding common ground, and exploring new ideas. The EWG provides an opportune platform for improving implementation of MEAs in the country (NEMC 2009).

On institutional and related coordination issues, the main highlights include the establishment of multi-sectoral steering committees, technical committees and consultative meetings to build national positions prior to related international meetings that comprise members/experts from different government ministries and institutions, NGOs and the private sector. These committees are usually tasked with advisory role.

There has also been an appreciable increase in the allocation of resources towards the implementation of MEAs generally. This is due to increased political will towards environmental management; domestication of international agreements on environment; and intervention through various strategies for environmental management NEMC 2009.

### **3.0 REGIONAL SYNTHESIS OF CONSTRAINTS FACED AND NEEDS FOR ASSISTANCE IN THE RATIFICATION OF INTERNATIONAL CONVENTIONS**

#### **3.1 Constraints on implementation and Justification of Assistance Needs**

Various scenarios emerge from the various countries as to the constraints on ratification and implementation of environmental conventions relevant to land-based activities and sources, as well as justifications for assistance and the assistance needed. In the following sections, the constraints faced by the countries in the WIO Region will be examined in more detail.

##### **3.1.1 Constraints on ratification and implementation.**

###### **(i) Lack of or Inadequate Technical Capacities**

Across the WIO region, lack of or inadequate technical capacities constrains ratification and/or implementation of LBSA relevant conventions. With regard to technical capacities, most of the countries lack adequate human and other resources to assist the countries decide which conventions to negotiate or ratify. The capacities in the respective offices responsible for state legal services are usually below the requirements and are frequently overstretched. Consequently many LBSA relevant conventions are not ratified by the countries, and even where they are ratified they are not adequately implemented. This means that the countries will need support for enhancement of human technical capacities through *inter alia* training courses and programmes, as well as attendance and participation at relevant technical meetings concerning LBSA related conventions.

On the other hand other technical requirements which are lacking or inadequate include basic equipment such as computers (including hardware and software), telecommunication facilities

and new information technologies generally. These constrain the effective or timely delivery of services to the relevant departments even in the cases where the human resource is available.

Lack of or inadequate technical capacities affect most of the countries including Comoros, Kenya, Madagascar, Mauritius, Seychelles, Mozambique, South Africa and Tanzania. This undermines the ability of the countries to properly address and formulate positions on complex matters of international law; ensure proper reporting, storage and archiving; as well as also ensures adequate research, studies and data collection.

**(ii) Lack of or inadequate financial capacities.**

Virtually all countries in the WIO region suffer from lack of adequate financial resources. This undermines their ability to negotiate, ratify or implement the various LBSA related conventions and protocols. Some of the countries are unable to meet their subscription requirements under the various conventions, affecting their ability to ratify or implement the instruments. Several of the countries run into years of arrears on their financial contributions to the conventions.

The low financial capacities also affects the countries' participation in negotiation, preparatory work, public education and awareness, technology transfer, and other work required for timely ratification and effective implementation of the conventions. Some of the countries allocate low budgets to work related to ratification and implementation of the conventions, and generally rely on external support to finance even routine work related to the implementation of conventions. Responsible ministries and departments such as state law offices, national environmental agencies, local or municipal authorities are therefore unable to effectively deal with their mandates concerning ratification and implementation of the conventions and protocols.

**(iii) Overlapping/Uncoordinated Institutional Mandates.**

In some of the countries in the WIO Region, notably those with devolved political systems such as the Comoros and South Africa, there is a tendency to have several institutions falling under various layers of Government (i.e. national, provincial or local) or under different government ministries and departments. Coordination problems also affect the other countries such as Kenya, Tanzania and Mauritius. Tanzania's coordination problems mainly arise from the jurisdictional and political relationship between mainland and Zanzibar. In Mauritius, the Ministry of Foreign Affairs is responsible for the negotiation, ratification and adoption of international conventions while the environmental mandate *per se* belongs to the Ministry of Environment. On the other hand the Ministry of Agro Industry and Fisheries, and Local Authorities are directly responsible for LBSA related issues. Another relevant institution is the Wastewater Management Authority. All these ministries and departments do not seem to have a coordinating mechanism, thus leading to lack of clarity as to their respective mandates in ratification and implementation of LBSA-related conventions and protocols.

In Kenya, the situation is similar, with ministries responsible for water, environment and natural resources, local authorities, transport and agriculture each having a role, without a coordinating mechanism. Apart from the National Environment Management Authority (NEMA), which is the premier environmental agency, there are other institutions such as water services boards, local authorities, regional development authorities, and research institutions, which all have certain LBSA related mandates.

In South Africa coordination problems relating to ratification and implementation of the LBSA related conventions and protocols also pose problems. The country has a large and sophisticated governance structure, which often results in un-coordinated administration. The national

government has a mandate through key national departments such as the Department of Foreign Affairs (DFA), which is responsible for negotiations and adoption of international conventions generally. It includes a Marine and Coastal Environment Directorate. Moreover, the Department of Environmental Affairs and Tourism (DEAT) is involved also in practice in negotiation meetings and in ensuring that the relevant international conventions are implemented. On the other hand, the Department of Water and Forestry (DWAF) is responsible for water quality and water-related international legal instruments. Other national government departments with LBSA-related mandates include the Department of Trade and Industry and the Department of Agriculture.

Thus, at the horizontal level, various national government departments lack co-ordination and appear to have overlapping mandates. At the provincial and local government level there is yet more overlapping and lack of co-ordination. There are four coastal provinces in South Africa, which have a direct bearing on LBSA issues: Northern Cape, Western Cape, Eastern Cape and Kwa-zulu Natal. While some national departments have provincial equivalents, others do not have. Moreover, while provincial and local governments do not have direct responsibility concerning negotiation and ratification of international conventions and protocols, they have responsibilities concerning implementation at the local level. At the level of implementation, further difficulties arise due to the multiplicity of laws and institutions, as well as the mandates of the provincial and local government.

In Mozambique, weak intra and inter-institutional capacity and unclear division of tasks of each of the key institutions involved in LBSA-related conventions has been identified as one of the constraints to ratification and implementation of the said conventions.

In Tanzania, the existing inadequate coordination at the national level somewhat hinders the level of achievements that can be made from implementation of the LBSA relevant conventions. The designation of Sector Environment Coordination Units in accordance with the Environmental Management Act (Cap 191) provides an opportunity for enhancing institutional coordination, support and commitment NEMC Report 2009.

**(iv) Multiplicity of Sectors affecting LBSA Issues.**

Closely related to the overlapping mandates of various institutions dealing with ratification and implementation of LBSA related conventions and protocols, is the multiplicity of sectors and players affecting LBSA issues. These range from physical planning, local government/authorities, agriculture, tourism, mining and other natural resources extraction, forestry, fisheries, regional development and transportation (including road infrastructure, air and water ports). All these sectors inter-lock in practice and it becomes difficult to negotiate ratify and/or implement LBSA related instruments without adequately involving all these stakeholder sectors that usually reflect different ministerial and departmental affiliations, which pose coordination difficulties. The various sectors and ministries often pursue different and conflicting mandates and priorities.

**(v) Lack of or inadequate Political Goodwill**

Another common constraint among the countries is the absence or inadequacy of political goodwill for LBSA related issues. There is a tendency among most of the countries to regard coastal and marine issues as lower-end or downstream in terms of national priorities. This is reflected in low financial allocations and technical resources. Also this is reflected in lack of comprehensive national policies to elaborate on the Government's approach as regards negotiation, ratification and implementation. Only some of the countries (South Africa, Tanzania

and Mozambique-and to an extent-Kenya) have sought to elaborate integrated coastal zone management (ICZM) policies. Thus, in many respects an over-arching policy framework concerning the negotiation, ratification and implementation of LBSA-related conventions and protocols is lacking in most of the countries in the WIO Region.

**(vi) Low Level of Public Awareness**

The lack of or inadequacy of political good will is also reflected in the low level of public education and awareness concerning LBSA related conventions and protocols and issues generally. Consequently, public participation in the processes related to negotiation, ratification and implementation of LBSA-related conventions and protocols seems weak. This has been contributed by a number of reasons, including: ratification process being limited to Government and Parliamentary organs; inadequate sensitization and information dissemination; and weak inter-institutional mechanism for information exchange. In this regard, there is often ineffective participation and feedback from stakeholders regarding processes and decisions in international meetings on or related to LBSA relevant conventions.

**(vii) Language and Legal System Constraints.**

Among the countries of the WIO region, there exist language constraints undermining the negotiation, ratification and implementation of the LBSA related conventions and protocols. This is particularly more so for Mozambique which is Portuguese speaking. Most of the LBSA related conventions and protocols are done in English and French. This includes the 1985 Nairobi Convention and its protocols as well as the draft LBSA Protocol to the Nairobi Convention (*UNEP/WIOLaB 2009*). The Mozambican legal system and national language is Portuguese and only a small fraction of the population speaks English or French.

The WIO region is rather evenly divided between French and English, with the mainland states being largely Anglophone while the island states are Francophone. However, except for the Seychelles and Mauritius which are bilingual, the rest of the countries are either Anglophone or Francophone or Lusophone. This undermines, to a certain extent, the region's capacity to collectively negotiate or agree to ratify and implement LBSA relevant conventions. This is further complicated by the different legal systems existing in the various countries.

The civil law system, common to Francophone and Lusophone countries, such as Madagascar, Comoros and Mozambique, creates long and complex procedures for the ratification and implementation of conventions. There are detailed constitutional and legal processes to be adhered to before ratification and implementation can take place.

Moreover, for countries with a dualist approach to international law, there is the necessity of domestication of international law instruments through consequential national legislation. This means that where the national parliament has not enacted a law to domesticate an international convention or protocol even if the latter were ratified, the same would not be implemented in the country. This usually causes delay or impediment to implementation of international legal obligations.

**(viii) Multiplicity of Regional Affiliations.**

The WIO countries belong to different and various regional economic blocks and arrangements. These include Small Island Developing States (SIDS) for the small island states (Comoros, Mauritius and Seychelles); Indian Ocean Commission (IOC)(all the island states); East Africa Community (EAC) (Kenya and Tanzania); Southern Africa Development Community (SADC) (South Africa, Mozambique, Mauritius and Tanzania); and Common Market for Eastern and

Southern Africa (COMESA)(Comoros, Madagascar, Mauritius, Seychelles, Kenya, Tanzania, and Mozambique). The multiplicity of regional arrangements has implication on the WIO Region as this reflects on varying levels of commitments; priorities and standards regarding LBSA-related issues; and a general absence of a common regional approach to tackling LBSA related conventions and protocols. However, the LBSA Protocol to the Nairobi Convention (2007) is reflective of a growing collective regional consensus and approach to tackling LBSA issues generally and particularly ratification and implementation of other LBSA-related instruments.

**(ix) Political Instability**

To a certain extent, political instability in some countries has affected participation in negotiations, ratification and implementation of LBSA-related conventions and protocols. For example the Comoros experienced many years of political and institutional instability, with frequent Government changes which caused confusion in government programmes including environmental activities and programmes. In the process, she lost time and opportunities in terms of participation in negotiation, and ratification and implementation of LBSA relevant instruments.

Other countries which have previously or recently suffered political instability include Madagascar, Mozambique and South Africa during the years of apartheid rule. Somalia, though not within the preview of the present study has suffered a devastating political instability for close to two decades. As a result of the turmoil in Somalia, there has been a sharp increase in the incidences of piracy in the Horn of Africa. Political instability, especially where armed conflict exists, leads to a general breakdown of legal and institutional systems as well as direct destruction and degradation of the environment.

**Table 12: List of Key Constraints to Ratifications and/or Implementation.**

(i)	Lack of or Inadequate Technical Capacities.
(ii)	Lack of or inadequate Financial Capacities.
(iii)	Overlapping/Uncoordinated Institutional Mandates.
(iv)	Multiplicity of Sectors affecting LBSA Issues.
(v)	Lack of or inadequate Political Goodwill.
vi.	Low levels of public awareness
(vii)	Language and Legal System Constraints.
(viii)	Multiplicity of Regional Affiliations.
(ix)	Political Instability.

**Table 13: Summary of Constraints per Country**

Country and Constraints	(i)	(ii)	(iii)	(iv)	(v)	Vi	(vii)	(viii)	(ix)
	Lack of or Inadequate Technical Capacities.	Lack of inadequate financial capacities.	Overlapping/ Uncoordinated Institutional Mandates.	Multiplicity of Sectors affecting LBSA Issues	Lack of or inadequate Political Goodwill	Low levels of public awareness	Language and Legal System Constraints	Multiplicity of Regional Affiliations	Political Instability
<b>Comoros</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes.
<b>Kenya</b>	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No
<b>Madagascar</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Mauritius</b>	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No
<b>Mozambique</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Seychelles</b>	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No
<b>South Africa</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Tanzania</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No

### 3.1.2 Justification and identification of assistance needs

The following needs for assistance are identified by the various WIO countries:-

(i) **Financial Assistance:** This may be in form of grants, loans and other sustainable funding mechanisms. Financial assistance would supplement any budgetary or other resources raised by the respective countries. All WIO countries typically need financial assistance for activities and processes related to ratification and implementation of LBSA related instruments.

(ii) **Technical Assistance:** Apart from financial assistance as such, technical assistance would also be required by the WIO countries. This may take the form of technology, expertise and skills transfer, equipment, programmes, training and human and technical capacity building needs. Others include the establishment of an Integrated International Environmental Conventions Clearinghouse for data storage, archival and retrieval. There is also a need to prepare standard procedures or protocol for the execution of treaties.

(iii) **Legal and Administrative Reforms:** Other needs for assistance, which may entail a combination of financial and technical assistance, include legal reforms in some countries which may also entail the enactment of new legislation relevant to LBSA issues (for example in South Africa); improvement of coordination mechanisms and better administrative models; and the establishment of a system of financial and other incentives and disincentives for better implementation of LBSA relevant conventions and protocols). Obviously, legal and administrative reforms would require relevant human and other capacity development programmes and enhanced public awareness and participation levels.

The justifications for the provision of such assistance may be defined as follows:

(i) LBSA issues are of great concern to the coastal and marine environment and resources of the WIO region. In all the countries, pollution and degradation of the coastal and marine environment is mainly from land based sources and activities. As for the global scenarios, as

much as 80% of all coastal and marine pollution is from land-based sources and activities. Thus it is important to regard as a priority, the assistance needs identified by the WIO countries.

(ii) While the various LBSA related conventions and protocols reflect global and regional consensus on the need and means to tackle coastal and marine environmental problems affecting the region, some of the countries have either not ratified or implemented some of the instruments. While on the whole most of the countries have ratified several important LBSA-related instruments, implementation of the same still remains problematic. Countries need financial and technical assistance as well as political good will to push on with implementation. In the case of non-ratification, countries need assistance to facilitate the process and more critically to implement the instruments.

(iii) The region needs to not only embrace principles of sustainable development but also to implement the same. Socio-economic development which is a key priority of the WIO Region states should not necessarily be at conflict with environmental protection. Land based sources and activities causing coastal and marine environmental problems are usually in themselves important socio-economic endeavours. They include agriculture, fisheries, ports, transportation, infrastructure and mining, among others. LBSA related conventions and protocols typically embrace the principles of sustainable development and are in fact important pillars for the realization of the goals of sustainable development. In other words, the region needs to ratify and implement LBSA related conventions and protocols as part of the efforts to attain sustainable development.

(iv) The WIO Region, comprising primarily of developing countries, lacks adequate financial and technical capacities and resources to enable the countries to both ratify and implement LBSA-related instruments. Budgetary constraints are typical in each of the project countries, leading to failure to provide at all or sufficiently for LBSA-relevant interventions and environmental protection generally. Lack of or inadequacy of financial resources also directly impacts on technical resources including human capacities, equipment and other requirements. It also undermines the ability of the countries to surmount problems such as low levels of public awareness, information and participation; weak coordination mechanisms among concerned institutions; and even weak legal policy and institutional frameworks.

(v) The countries lack appropriate regional models for effective negotiation ratification and implementation of LBSA-related instruments. The absence of such models calls for appropriate assistance to develop not only the models, but also regional and national capacity to undertake negotiations, ratification and implementation of relevant instruments in the future. Such capacity could be replicated across the region and in the countries.

### **3.2 Linkages to the Development, Ratification and Implementation of the LBSA Protocol to the Nairobi Convention.**

As noted earlier the WIO Region is anticipating the adoption and ratification of an LBSA Protocol to the Nairobi Convention. This reflects growing consensus among the countries of the region concerning a collective approach to tackle the environment problems of their coastal and marine zones. In this regard, the enactment of a new LBSA Protocol will serve to consolidate the legal and institutional framework for the protection of the marine and coastal environment of the WIO Region as a whole, and for the individual countries.

It is anticipated that the development and finalization of the LBSA Protocol to the Nairobi Convention would catalyze and inspire the reform of relevant national and institutional frameworks to not only align them to the new protocol, but also to supply better coordination among relevant institutions.

Effective regional cooperation is important for the successful implementation of the GPA and other global and regional commitments concerning LBSA. The development, ratification and eventual implementation of the LBSA Protocol to the Nairobi Convention will supply an important legal context and framework for the implementation of other global or regional conventions and Protocols relevant to LBSA. Thus there will be an important synergy between the Nairobi Convention framework and other global and regional instruments. It is therefore critical that countries of the region not only expedite negotiations of the LBSA Protocol, but also focus on its timely ratification and implementation. Under Article 4(2) of the Nairobi Convention contracting states are obliged to cooperate in the formulation and adoption of protocols to facilitate the effective implementation of the Convention.

For each of the countries of the region, enhancement of financial and technical capacity ratify and implement LBSA-related conventions and protocols may also work well for the development, ratification and implementation of the LBSA Protocol. Parts of these capacities arise from the sharing of experiences among the countries of the region, as well as the replication of experiences and best practices from other regions.

Finally, the development, ratification and implementation of the LBSA Protocol to the Nairobi Convention provides an opportunity to not only bear upon the countries to ratify and/or implement other LBSA-relevant instruments, but also to keep in audit the performance and efficacy of those instruments as vehicles for dealing with LBSA environmental problems across the region. The LBSA Protocol to the Nairobi Convention could provide a regional obligation and mechanism for tracking the progress made in the ratification and implementation of LBSA relevant conventions and Protocols.

## **4. CONCLUSIONS AND RECOMMENDATIONS**

### **4.1 Conclusions**

The study has come up with the following findings and conclusions:

- The status of ratification of LBSA related international conventions, agreements and protocols is remarkably high in many of the countries of the Region. Kenya, Madagascar, Seychelles, and South Africa are good examples of a high rate of ratification. However, in some cases countries have not ratified important conventions (see Table 3).
- The status of implementation of the various LBSA related conventions, agreements and protocols is equally impressive generally across the WIO region, as evidenced by the number of national legislations, institutions and other instruments in the countries. However, the greater challenge across the countries has to do with providing proper and meaningful effect to the international obligations concerning LBSA and other marine environment concerns
- The main constraints identified with regard to ratification and/or implementation of the LBS related conventions, agreements and protocols include: the multi-sectoral and multi-faceted nature of LBSA issues and sectors, making it difficult to have dedicated and focused national

laws, institutions, policies and other mechanisms necessary for the effective implementation and enforcement of the international commitments; lack of or inadequate financial and technical resources in budgetary allocations; lack of or low technical capacities to support ratification and more importantly implementation of international commitments; and; and a general absence of political will to address LBSA related issues as they bring to the fore the development-environment tension. Others are: low levels of public awareness; different language and legal systems; multiplicity of regional affiliations; overlapping and uncoordinated institutional mandates; and political instability.

- The countries of the Region converge on the point of the need for development of an LBSA Protocol to the Nairobi Convention. Each of the countries believes in the merit of a regional framework on LBSA issues, in order to, *inter alia*, give momentum to focused attention on LBSA issues nationally and regionally; help in the development of new or reviewed/amended legislation and institutions dedicated to LBSA; and generally focus on ratification and/ or implementation of LBSA related international instruments.

## **4.2 Recommendations**

The following are the recommendations of the study, based partly on the recommendations made in the national reports, and partly on the regional issues that arise from this regional study:

4.1 Each of the countries review its current national legal, institutional and policy grounding for the LBSA related international conventions, agreements and protocols with a view to strengthening their capacities to effectively deal with ratification and/or implementation of LBSA related international instruments. This would include, among others, measures to improve the capacities of the countries to participate in negotiation of these instruments in the first place (for example the LBSA Protocol to the Nairobi Convention); beefing up the capacities of the relevant focal points for the LBSA related conventions and other instruments; and also improving the capacities of implementing and enforcement agencies and authorities.

4.2 Countries should undertake detailed national level studies on the status of implementation and compliance with the various multi lateral environmental agreements (MEAs) with a view of improving their performance in implementation and compliance. This would include those which are LBSA relevant.

4.3 A sustainable framework of assistance be established for each of the countries in the WIO Region based on the needs identified and justified in the national studies and the regional experiences gathered in this study. Some of the needs expressed and justified include institutional and technical capacity building, including secretariat and focal point support; training and equipping of key technical, scientific and management personnel; provision of budget support funds; and the establishment of inter-agency cooperation and coordination mechanisms; and legal reviews or development of new LBSA legislation.

4.4 The Nairobi Convention and/or other partners consider, as a matter of urgency, to provide support to the countries in order to enable them to effectively participate in the on going process of the development of the LBSA Protocol to the Nairobi Convention, and particularly in national level consultations and dissemination of outcomes and issues of that process.

4.5 The Nairobi Convention, or other partners, consider supporting the development of new LBSA related national legislations and support institutions for those countries which have

favoured that approach, in order to create LBSA legislative and institutional models for the WIO region.

4.6 Countries to consider the establishment of national task teams to champion the ratification and/or effective implementation of LBSA related international conventions, agreements and protocols; and in this regard to establish institutional and budgetary support for those teams; create greater scope for publicity and wider public participation in LBSA related subjects and issues; and generally mainstream LBSA issues in the national developmental and environmental agenda.

4.7 Countries that have not signed or ratified LBSA relevant conventions and protocols should consider such steps for their ratification. This would be beneficial both to the individual countries and the region as a whole. Moreover, once they ratify, the countries should expedite and maintain the fulfilment of their obligations under the respective instruments, including payment of their computed contributions.

4.8 Finally, as part of their implementation of LBSA relevant conventions and protocols, the WIO countries should establish fully funded National Offices/Secretariats for such instruments. This would enhance the visibility of the instruments and offer critical institutional support for their implementation.

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