UNITED NATIONS ENVIRONMENT PROGRAMME
PROJECT DOCUMENT

SECTION 1 – PROJECT IDENTIFICATION

1 PROJECT IDENTIFICATION

1.1	**Project title:**	Implementation of the Strategic Action Programme for the protection of the Western Indian Ocean from land-based sources and activities (**WIO-SAP)**
1.1	**Project number:**	4940(GEF)
1.2	**Trust Fund:**	
1.3	**Strategic objectives:**	IW1, IW2
1.4	**Project type:**	FSP
1.5	**Geographical scope:**	Comoros, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, Somalia, South Africa, Tanzania [and France (not project beneficiary)]
1.6	**Mode of execution:**	Internal
1.7	**Project executing organization**	Nairobi Convention Secretariat
1.8	**Duration of project:**	**60 months** Commencing: June 2016 Completion: June 2021

1.9 Cost of project [and financing modalities]:

Funding Source	**Value (million US$)**	**%**
GEF IW	10,867,000	12.3
National co-financing (cash and in-kind)	**67,248,741**	76.0
Comoros	5,900,000	
France Reunion		
Kenya	12,000,000	
Madagascar	1,200,000	
Mauritius	4,500,000	
Mozambique	19,000,000	
Seychelles	4,600,000	
Somalia	168,400	
South Africa	5,280,341	
Tanzania	14,600,000	
Co-financing (NGOs and others)	**7,122,000**	8.0
Birdlife International	1,262,600	
WIOMSA	4,110,000	
WWF	1,7500,00	
UNEP	**3,315,000**	3.7
Nairobi Convention Trust Fund	1,750,000	
UNEP's Marine and Coastal Programme under the Division of Environmental Policy Implementation (DEPI)	1,565,000	
Total	**88,553,341**	100

1.10 Project Summary

There is a broad scientific consensus in the Western Indian Ocean (WIO) region that the critical coastal and marine ecosystems, mainly mangroves, seagrasss beds, estuaries/rivers and coral reefs will continue to be degraded by the impacts of land-based sources and activities without significant conservation interventions that cuts across the region. The Project entitled '*Implementation of the Strategic Action Programme for the protection of the Western Indian Ocean from land-based sources and activities*' (WIOSAP) is intended '*to reduce impacts from land-based sources and activities and sustainably manage critical coastal and marine ecosystems through the implementation of the agreed WIO-SAP priorities with the support of partnerships at national and regional levels'*. The WIOSAP project is largely based on the WIO-LaB Strategic Action Programme (SAP) for the protection of the WIO Region from land-based sources and activities that was developed as part of the UNEP-GEF WIO-LaB Project that was implemented in the WIO Region in the period 2004 - 2010. The WIOSAP project is thus a response to a request made by the Contracting Parties to the Nairobi Convention and it presents an opportunity to the governments in the region and their conservation partners to jointly implement strategies of protecting the coastal and marine ecosystems from land-based sources and activities to provide essential goods and services on sustainable basis. Without such an intervention, degradation of the region's valuable coastal and marine resources will continue unabated with a likelihood of reversing gains made by governments and conservation organisations in the region. The project recognises that concerted management effort will contribute substantially to poverty alleviation and gender equality, through sustainable livelihoods and economic development. The project will build on the national and regional conservation initiatives being undertaken by all participating countries governments and conservation organisations involved in the project at the local, national and regional levels. The project addresses main threats to the critical coastal and marine ecosystems of the WIO Region as identified in the TDA developed under the concluded WIO-LaB Project that focussed on addressing land-based activities and sources of degradation of the coastal and marine ecosystems; including physical alteration and destruction of habitats; water and sediment quality deterioration due to pollution; and the alteration of river freshwater flows and sediment loads. The project addresses cross-cutting issues of governance and awareness which are important in the sustainable management of the coastal and marine ecosystems in the region. To address these main threats, the project has four main components:

- Component A: *Sustainable management of critical habitats* focuses on the protection, restoration and management of critical coastal habitats and ecosystems recognizing the enormous value of healthy critical coastal and marine habitats for the future well-being of people in the WIO region.
- Component B: *Improved water quality* focuses on the need for the WIO Region's water quality to attain international standards by the year 2035.
- Component C: *Sustainable management of river flows* aims at promoting wise management of river basins in the region through implementation of a suite of activities aimed at building the capacity for environmental flows assessment and application in river basins of the region.
- Component D: *Governance and regional collaboration* focuses on strengthening governance and awareness in the WIO region with a view to facilitating sustainable management of critical coastal ecosystems and habitats.

The project responds to the GEF Corporate Goals 1 and 4: '*Global natural resources'* and '*Building national and regional capacities and enabling conditions for addressing transboundary systems*' respectively, and more specifically to the GEF Strategic programme objectives for international waters '*catalyze multi-state cooperation to rebuild marine fisheries and reduce pollution of coasts and Large Marine Ecosystems*'.

The project contributes to Sub-programme 3 of the UNEP Programme of Work on "Ecosystem management" and in particular expected accomplishments 3(a), (b), and (c) with the aim to contribute to countries increasingly being able to practice integrated management of terrestrial and freshwater ecosystems and mainstreaming cross-sectoral and integrated ecosystem management principles in their development and planning processes (Expected outcome (a) and expected accomplishment (b).

Services and benefits derived from ecosystems will be increasingly integrated into national development planning and accounting (expected accomplishment c).

The project contributes to the WIO region's priorities for addressing the impacts of climate change and also supports core human and institutional capacity building in line with other GEF-IW strategic objectives. The project will be implemented and executed through a "Partnerships Approach" with the Nairobi Convention Secretariat being the executing agency. The participating countries include Comoros, Madagascar, Mauritius, Seychelles, Mozambique, Kenya, Tanzania, Somalia and South Africa.

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LIST OF ACRONYMS AND ABBREVIATIONS

AIMS	Africa's Integrated Maritime Strategy (of African Union)
ANC	Assistant National Coordinator
AfDB	African Development Bank
AMCEN	African Ministerial Council for the Environment
AMCOW	African Ministerial Council on Water
ASCLME	Agulhas and Somali Current Large Marine Ecosystem
BOD	Biochemical Oxygen Demand
CBD	Convention on Biological Diversity
CEAN	Coastal East Africa Network Initiative (of WWF)
COAST	Collaborative Actions for Sustainable Tourism (GEF/UNEP/UNIDO project)
COMESA	Common Market of Eastern Africa
CORDIO	Coastal Oceans Research & Development in the Indian Ocean
DEPI	Division of Environmental Policy Implementation
EAC	Eastern African Community
EARPO	Eastern Africa Regional Programme Office (of WWF)
EBM	Ecosystem Based Management
FAO	Food & Agriculture Organization (of the UN)
GEF	Global Environment Facility
GEO	Global Environment Outlook
GPA	Global Programme of Action for the Protection of the Marine Environment from Land-based Activities
ICZM	Integrated Coastal Zone Management
IOC	Indian Ocean Commission
IUCN	World Conservation Union
IW	International Waters
IMO	International Maritime Organisation
IOTC	Indian Ocean Tuna Commission
IAEA	International Atomic Energy Agency
LBSA	Land Based Sources & Activities
LMMA	Locally Managed Marine Area
LOICZ	Land-Ocean Interactions in the Coastal Zone
MCS	Marine & Coastal Strategy (of UNEP)
MDGs	Millennium Development Goals
M&E	Monitoring & Evaluation
MPA	Marine Protected Area
NC	Nairobi Convention for the protection, management and development of the marine and coastal environment of the Eastern African region
NCS	Nairobi Convention Secretariat
NEPAD	New Partnership for Africa's Development
NFP	National Focal Point (for the Nairobi Convention and the project)
NIIC	National Integration & Implementation Committee
NGO	Non-Governmental Organization
PACSICOM	Pan African Conference on Sustainable Integrated Coastal Management
PADH	Physical Alteration & Destruction of Habitat
PBWO	Pangani Basin Water Office
PSC	Project Steering Committee
ReCoMaP	Regional Programme for the Sustainable Management of the Coastal Zone of the Indian Ocean Countries
ROA	Regional Office for Africa (of UNEP)
RSA	Republic of South Africa
RUBADA	Rufiji Basin Development Authority
SADC	Southern Africa Development Community
SAP	Strategic Action Programme

SEA	Strategic Environmental Assessment
SIDA	Swedish International Development Agency
SIDS	Small Island Developing States
SWIOFP	South West Indian Ocean Fisheries project
SPAW	Specially Protected Areas & Wildlife (Protocol of the Nairobi Convention)
SSA	Special Service Agreement
TARDA	Tana and Athi Rivers Development Authority
TDA	Transboundary Diagnostic Analysis
TNC	The Nature Conservancy
UN	United Nations
UNCLOS	United Nations Convention on the Law of the Sea
UNDP	United Nations Development Programme
UNEA	United Nations Environment Assembly
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific & Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
UNDP SAPPHIRE	The Western Indian Ocean Large Marine Ecosystems Strategic Action Programme Policy Harmonisation and Institutional Reform.
WWM TF	Wastewater Management Task Force
WB	World Bank
WIO	Western Indian Ocean
WIO-C	Consortium for Conservation of Coastal and Marine Ecosystems in Western Indian Ocean
WIO-LaB	Addressing Land-based Activities in the Western Indian Ocean (GEF/UNEP project)
WIO-SAP	Implementation of the Strategic Action Programme for the Protection of the Coastal and Marine Environment of the Western Indian Ocean from Land-based Sources and Activities (GEF/UNEP/WWF project)
WIOMER	Western Indian Ocean Eco-Region (of WWF)
WIOMSA	Western Indian Ocean Marine Science Association
WIO-SME	Western Indian Ocean - Super Marine Ecosystem
WWF	World Wide Fund for Nature
WIO SAP	Western Indian Ocean Strategic Action Programme for the protection of the coastal and marine environment from land-based sources and activities

2 SITUATION ANALYSIS

2.1 Background and Context

The Project entitled 'Implementation of the Strategic Action Programme for the protection of the Western Indian Ocean from land-based sources and activities' (WIOSAP) is intended 'to reduce impacts from land-based sources and activities and sustainably manage critical coastal-riverine ecosystems through the implementation of the WIO-SAP priorities with the support of partnerships at national and regional levels'. The project builds on the WIO-LaB Strategic Action Programme (SAP)[1]for the protection of the WIO Region from land-based sources and activities that was developed under the auspices of the UNEP-GEF WIO-LaB project[2] and which identified key actions that need to be undertaken in the region in order to reverse the degradation of the coastal and marine ecosystems. The WIO-LaB Project that delivered the SAP was essentially focused on land-based activities and sources of degradation of the coastal and marine environment.

The objective of the WIO-LaB SAP is consistent with the objective of the Contracting Parties to the Nairobi Convention, which is"…*to prevent, reduce and combat pollution of the Convention area and to ensure sound environmental management of natural resources using ...the best practicable means at their disposal and in accordance with their capabilities*." The WIO-LaB SAP has a similar objective, which is: "*People of the region prosper from a healthy Western Indian Ocean, with reduced impacts from land-based sources and activities through implementation of national and regional levels activities including through partnerships and greater integration of river basin and coastal and marine resource management.*"

The WIOSAP Project will use GEF funding to enhance the protection of the critical coastal and marine ecosystems from land-based sources and activities in nine countries in the Western Indian Ocean (WIO) region. The critical coastal and marine ecosystems – particularly the mangroves, seagrass beds and coral reefs are rapidly being degraded by a variety of land-based anthropogenic drivers and their ability to provide essential goods and services is rapidly declining throughout the region. The current conservation initiatives in the region are limited and are largely insufficient to cause significant reversal of the degradation of these ecosystems. Strengthened policy and regulatory frameworks, building the capacity for ecosystem-based management including wastewater management and the restoration of degraded coastal ecosystems are required. These changes will result in global environmental benefits in the nine countries and more widely within the Western Indian Ocean region because of the transboundary nature of the marine ecosystems and through exchange of lessons at national and regional levels.

The Western Indian Ocean region (Figure 1) contains diverse coastal and marine ecosystems[3][4]that support local and national economies (Table 1). The critical coastal and marine ecosystems also provide valuable ecosystem services including sequestration of carbon. They also provide habitat for marine biodiversity and are considered to be one of the most valuable ecosystems in the world. These ecosystems have also been of great benefit to coastal communities particularly as sources of livelihood, food and energy. Despite the benefits associated with coastal and marine ecosystems, the

[1] UNEP/Nairobi Convention Secretariat, WIOMSA (2009b): Strategic Action Programme for the Protection of the Coastal and Marine Environment of the Western Indian Ocean from Land Based Sources and Activities, UNEP, Nairobi Kenya, 156p.

[2] UNEP–GEF (2004a): Project Document for the UNEP-GEF WIO-LaB Project entitled 'Addressing Land-based Activities in the Western Indian Ocean', UNEP, GEF, Nairobi Convention Secretariat, Nairobi, Kenya, 102p.

[3]Spalding, M.D., Blasco, F. and Field, C.D., (eds.) 1997.*World Mangrove Atlas*. The International Society for Mangrove Ecosystems, Okinawa, Japan.178 pp.

[4]Spalding, M.D., Ravilious, C. and Green, E.P. 2001.*World Atlas of Coral Reefs*. University of California Press, Berkeley, CA.

anthropogenic stresses on these ecosystems, particularly from land-based sources and activities are increasing and causing damage to the integrity of these ecological systems. The increasing threats arising from land-based sources and activities mean that the ecosystems in the region will continue to be degraded to the point where they will cease to exist to provide essential goods and services, with severe consequences at local, regional and global levels. This is particularly so if no concrete conservation measures are undertaken in the region. In recent years, there has been a considerable effort in generating knowledge/baseline information on the status of coastal and marine ecosystems in the region including the main threats, through a number of national and regional interventions some of which have been financed by GEF (e.g. UNEP-GEF WIO-LaB Project, UNDP-GEF ASCLME Project, World Bank-GEF SWIOF Project, among others). While these projects have generated a lot of data and information, there is now a consensus by governments in the region that concrete measures need to be implemented, as a matter of urgency, on the ground in order to reverse the rapid degradation of the coastal and marine ecosystems.

The main transboundary problems in the region related to land-based sources and activities have been identified in the WIO-LaB TDA[5], which grouped problems into three distinct clusters: (i) Water and sediment quality degeneration due to pollution from land-based sources; (ii) Physical alteration and destruction of habitats; and (iii) Alteration in freshwater flows and sediment loads from rivers. A significant amount of the pollution load in the WIO Region emanates from land-based activities, such as municipal and industrial effluents, contaminated surface run-off including groundwater and agricultural return flows. In most of the countries, contaminants from land-based activities are disposed of in the coastal zone where they affect some of the most productive areas of the coastal and marine environment, such as mangrove-fringed estuaries, tidal creeks and near-shore waters. Moreover, contaminants which pose risks to human health and living organisms can be transported long distances by watercourses, ocean currents and atmospheric processes[6]. The TDA identified five distinguishable priority pollution categories in the region, namely: Microbial contamination, Suspended solids, Chemical pollution, Marine litter (including debris), and Eutrophication (harmful/nuisance algal blooms).

The physical alteration and loss of the critical coastal and marine habitats such as mangroves, seagrass beds and coral reef is another priority transboundary problems in the WIO region identified in the TDA. The causes of the habitat transformations are both physical, as in the clearance of mangrove forests and seagrass beds, diversion of rivers and alteration in freshwater flows, trampling of corals and construction of ports, tourist resorts, and housing developments; and biological, as in the selective removal of certain key species/elements of the ecosystems leading to modification of ecosystem structure, linkages and interactions. The cumulative impacts of these habitat transformations and losses have been manifested by significant decline in many ecosystem goods and services. The five categories of PADH identified in the TDA are: Degradation of mangrove forests, Degradation of seagrass beds, Degradation of coastal forests, Degradation of coral reefs and Shoreline changes.

One of the key areas of concern for the WIO region relates to the interaction between river basins and the coastal and marine environment. Throughout much of the region, more so for continental states, the degradation of coastal ecosystem is attributed to human activities far removed from the coast. Extensive catchment deforestation, inappropriate land use practices, land reclamation for agriculture and unplanned urban development in river basins have been the main causes of degradation of coastal ecosystems located at the outlets of major river systems in the region such as Tana, Sabaki, Pangani,

[5] UNEP/Nairobi Convention Secretariat, WIOMSA (2009a): Transboundary Diagnostic Analysis of Land Based Sources and Activities Affecting the Western Indian Ocean Coastal and Marine Environment, UNEP, Nairobi Kenya, 378p.

[6] UNEP (2009): Regional Synthesis Report on Pollution Status in the WIO: Summary report on land-based activities and sources of pollution affecting the marine environment in the WIO Region. Compiled by CSIR-Durban. WIO-LaB Project Report, Nairobi, Kenya.

Rufiji, Ruvuma, Incomati, Zambezi and Betsiboka[7]. The anthropogenic activities in river basins have altered the nature and the hydrology of river systems – large and small – impeding the flow of freshwater, terrigenous sediment, nutrients and organic matter. They have also affected the quality of the water, mainly through the addition of nutrients and pollutants from domestic sewage and industrial and agricultural practices. The two key problem areas related to river-coast interaction that have been distinguished in the TDA are: Alteration of river flow and degradation of water quality and Alteration of river sediment load.

The anthropogenic threats to the coastal and marine ecosystems are being exacerbated by climate change and variability. Climate change, which is attributed to human activities, has led to abnormal rainfall patterns, droughts, floods, and sea level changes. Climate change and variability also has a potential of modifying the ocean current system in the WIO region including the linked atmospheric processes. A good example is demonstrated in the case of the El-Nino Southern Oscillation (ENSO) phenomena and the Indian-Ocean Dipole (IOD) whose influence is not only restricted to coastal and marine ecosystem processes but also includes influences on rainfall patterns and subsequently on river flows in the region. These in turn influences the linked coastal ecosystems.

A key emerging element in the regional context is also the recent upsurge of oil and gas exploration and exploitation in the region. Since the conclusion of the WIO-LaB TDA and SAP in 2009, the region has seen numerous new oil and gas discoveries that will transform the region into a major player on the international oil and gas market. These discoveries and the eminent risk associated with large-scale oil and gas developments, warrants close attention to the governance challenges of the WIO region.

Most of the countries in the WIO Region apart from Seychelles, Mauritius and South Africa have Medium to Low Human Development Indices and a very high percentage of their populations is poor and lives in rural areas. Poverty is endemic in most of the countries in region with a large segment of coastal population (more than 50%) living below poverty line[8][9] (Table 2). This has led to high dependence on natural coastal and marine resources as the main source of livelihood. This in addition to lack of livelihood alternatives have resulted in coastal communities over-exploiting the natural resources and using destructive harvesting practices which damage ecosystems. There is also increasing pressure from the rapidly increasing population which is estimated to be expanding at a rate of above 1.2% per annum in most countries in the region. The rapid population growth and expansion in the region is already stressing the coastal and marine ecosystems, through increased exploitation of natural resources, discharge of wastewaters/effluents, and destruction of habitats through various activities such as the expansion of settlements, agriculture, among others.

The project would be implemented within the framework of the Nairobi Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Western Indian Ocean Region. The Convention is an important regional platform for addressing challenges affecting the marine and coastal ecosystems of Western Indian Ocean through catalytic interventions, dialogue and partnerships. The Contracting Parties to the Nairobi Convention include Somalia, Kenya, Tanzania, Mozambique and South Africa and the island states of Seychelles, Comoros, Mauritius, Madagascar, and Reunion, which is part of France. The governments of these countries have agreed through a highly consultative process, on a suite of national and regional collective actions that are required to address major stresses on the marine and coastal environment of the region.

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[7] UNEP/Nairobi Convention Secretariat (2010): An assessment of hydrological and land use characteristics affecting river-coast interactions in the Western Indian Ocean region. WIO-LaB Project, Nairobi, Kenya, 46p.
[8]UNDP (2006): Human Development Report (2006): Beyond Scarcity: Power, poverty and global water crisis. http://hdr.undp.org/hdr2006/statistics/indicators/5.html.
[9]Gössling, S (2006): Towards Sustainable Tourism in the Western Indian Ocean. *W Indian Ocean J. Mar. Sci.***5** (1): 55-70.

Table 1: Bio-physical and geographic characteristics of countries in the WIO region.

Country	Coastline (km)	Territorial waters (km^2)	Continental shelf (km^2)	Mean River Runoff (km3/yr)	River sediment load ($x10^6$t/yr)	Coral reef area (km^2)	Mangrove area (km^2)	Seagrass area (km^2)
Kenya	536	12,832	8,460	3835	6.8	630	610	33.6
Madagascar	4,828	124,938	96,653	NA	NA	2,230	2,991	NA
Mozambique	2,470	70,894	73,300	67–19013	22–43 10–34	1,860	2,909	439
Seychelles	491	45,411	31,479	NA	NA	1,690	32	NA
Somalia	3,025	68,849	40,392	NA	NA	710	48	NA
South Africa	2,881	74,699	160,938	46	7	~50	31	~7
Tanzania	1,424	36,578	17,903	96 NA	NA 15–17	3,580	1,287	NA

Source: UNEP 2009; Spalding et al. 2010. Although Ruvuma River is placed in Tanzania, it actually lies on the border between Tanzania and Mozambique. MAR – mean annual runoff; NA – not available

Table2: **Land area, population size and GDP of the Western Indian Ocean countries.**

Country	**Size of land area (km^2)**	**Population (millions)**	**Population living within 100 km from coast (millions)**	**GDP 2004 (US$ billions)**	**GDP Per Capita (PPP US$) 2004**	**Human Development Index (HDI)**	**Population growth rate per year**
Kenya	582,650	33.5	3	16.1	1,140	0.491	2.3
Tanzania	945,087	37.6	8.625	10.9	674	0.430	1.8
Mozambique	801,590	19.4	6.154	6.1	1,237	0.390	1.9
South Africa	1,219,912	47.2	11.664	212.8	11,192	0.650	1.1
Seychelles	455	0.082	0.082	0.7	16,652	0.842	1.0
Comoros	2,170	0.8	0.572	0.4	1,943	0.556	2.1
Madagascar	587,040	18.1	5.92	4.4	857	0.509	2.7
Mauritius	2,040	1.2	1.2	6.0	12,027	0.800	0.4
La Reunion (France)	2,517	0.766	0.766	9.4	12,400	0.87	1.6
TOTAL		158.648	38.003				

Sources: Gossling, 2006; UNDP: Human Development Report 2006

This consensus is elaborated in the WIO-LaB SAP including also in the revised Nairobi Convention and its three protocols, namely: (i) Protected Areas and Wild Fauna and Flora Protocol; (ii) Cooperation in Combating Marine Pollution in Cases of Emergency Protocol and (iii) Combating

Land-Based Sources and Activities of pollution (LBSA)Protocol[10]. The Convention is currently negotiating the fourth protocol on Integrated Coastal Zone Management (ICZM).

Between 2005-2013, the GEF's International Waters (IW) focal area co-financed a suite of projects to support the participating countries in the WIO region in fulfilling their commitments to the Nairobi Convention objective as well as other regional and global objectives. These projects included the UNEP-GEF WIO-LaB Project, UNDP-GEF ASCLME Project, World Bank-GEF SWIOF Project,

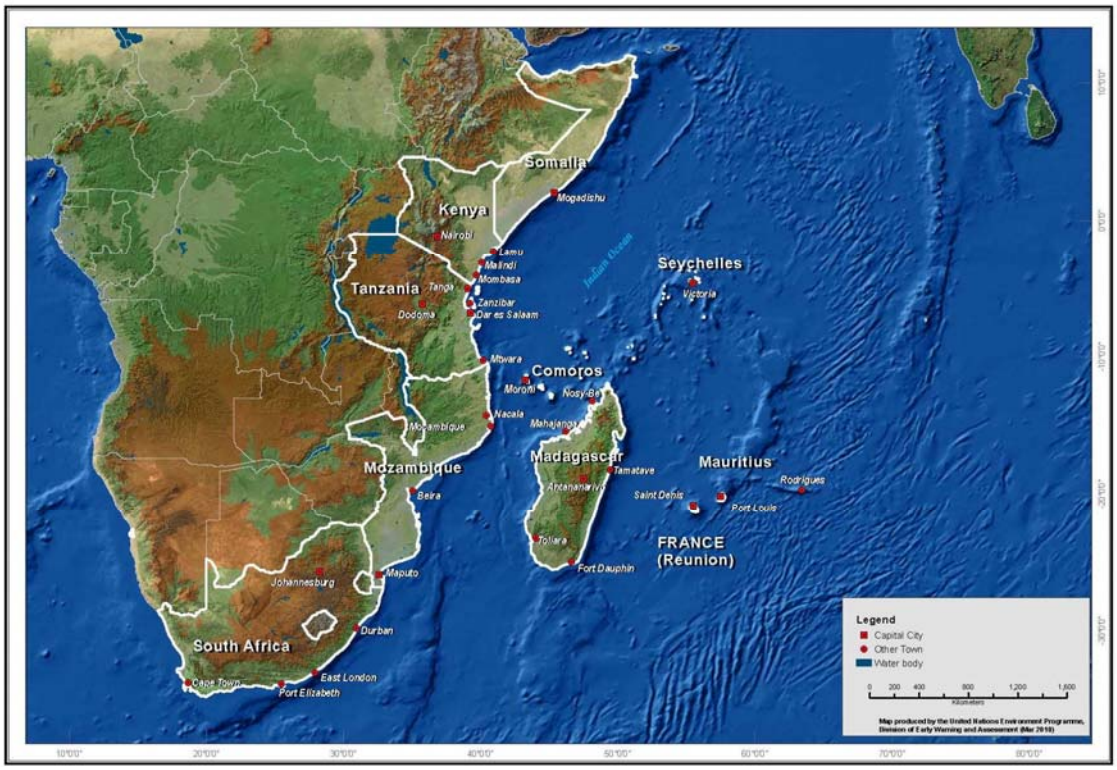

***Figure* 1.**The Western Indian Ocean Region

among others. Under the UNEP-GEF WIO-LaB Project, a TDA was completed in 2009. A SAP was also finalised and subsequently formally endorsed by the participating countries in 2010 in a Conference of Plenipotentiaries which also endorsed the LBSA Protocol. The requirements and agreements formally adopted by the governments of the participating countries through the SAP were subsequently translated and captured into activities in support of the Nairobi Convention.

The WIO-LaB TDA achieved regional consensus on the underlying root causes and drivers of degradation of the coastal and marine environment, while the WIO-LaB SAP informed the priority actions required to enable the contracting parties to the Nairobi Convention to respond to the root causes of the degradation of the coastal and marine ecosystems including fulfilment of their obligations under the LBSA Protocol. The SAP together with the LBSA Protocol therefore provides the agreed regional framework for this project, which is largely designed to support the contracting Parties in the implementation of the LBSA Protocol. The WIO-LaB project was rated as 'Satisfactory' in its Terminal Evaluation as it had exceeded a number of its targets, including co-finance mobilization.

[10]*Protocol on Protected Areas and Wild Fauna and Flora* (PAWF) and the *Protocol concerning Cooperation in Combating Marine Pollution in Cases of Emergency (both in 1985) and* the Protocol for the Protection of the Marine and Coastal Environment of the Western Indian Ocean from Land-Based Sources and Activities, the latter adopted in Nairobi, Kenya on 31 March 2010.

This project is considered to be a major investment for a coordinated effort in the conservation and management of the critical coastal and marine ecosystems which is important for the continued provision of essential ecosystem goods and services at local, national, regional and global levels. This investment is a follow-up to the WIO-LaB Project with the ultimate goal of reversing the degradation of the coastal and marine ecosystems in the region through concerted effort by the governments and their conservation partners in the region. The project is coming at a time when the need for addressing major threats to the sustainability of the critical coastal and marine ecosystems, has been demonstrated through regional consensus within the framework of Nairobi Convention.

The geographic coverage of the project is the western region of the Indian Ocean along the eastern margin of the continent of Africa including the island states of Seychelles, Mauritius, Comoros, France Reunion and Madagascar. The region stretches south of the Arabian Sea to Cape of Good Hope in South Africa. The region encompasses coastal areas from river basins and estuaries to the seaward boundaries of continental shelves. The width of the continental shelf of the WIO region tends to increase southwards from the Somali coast in the north and extends to 150m depth on average.

2.2 Global Significance

The WIO region covers approximately 22.3 million square kilometres and is floored by deep abyssal plains and bounded to the west by non-volcanic continental shelves. The Mascarene Plateau is the most prominent bathymetric feature of the Indian Ocean and extends as a submerged part-continental and part-volcanic plateau for over 1,500km. It includes a wide diversity of coastal habitats including rocky shores, sandy beaches, coral reefs, mangrove systems, seagrass beds and estuaries which, in combination, supply a wealth of ecosystem services to the human populations along the coast. However, coastal habitats are at high risk because of their proximity to land and marine based impacts and because they are easily accessible from land and vulnerable to overexploitation if not managed properly (see Figures 1 and 2).

Biodiversity Value: The critical coastal and marine ecosystems include aquatic ecosystems that usually occur between the shoreline and the continental shelf. These ecosystems include mangroves, seagrass beds and coral reefs. The critical coastal and marine ecosystems such as mangroves, seagrass beds and coral reef are characterized by high diversity that makes the region unique. These ecosystems are also important sources of livelihood for more than 60 million people living within 100 km of the coast-line. The critical ecosystems also contribute immensely to the economies of countries in the region. With a combined coastline exceeding 15,000 km (including those of the island states) and a total continental shelf area of about 450,000 km^2, the economic value of the goods and services provided by the coastal and marine environment in the WIO region is enormous, with current conservative estimates of over US$ 22 billion annually[1112].

These critical ecosystems are under threat from a range of human impacts including pollution, sedimentation, physical removal, human settlement and the damaging effects of fishing. One hundred and four introduced or alien species and 45 cryptogenic species have been identified within the region of which only 5 are considered to be invasive. However, the data available are very limited and are likely incomplete.

The WIO region is also part of the broader Indo-Pacific biogeographic region and it shares a significant proportion of its biodiversity with a band of inter-connected marine ecosystems stretching

[11] UNEP/Nairobi Convention Secretariat, WIOMSA (2009): Transboundary Diagnostic Analysis of Land Based Sources and Activities Affecting the Western Indian Ocean Coastal and Marine Environment, UNEP, Nairobi Kenya, 378p.
[12]ASCLME/SWIOFP 2012. Transboundary Diagnostic Analysis for the western Indian Ocean. Volume 1: Baseline

from the east coast of Africa to the west coast of South America, with its biodiversity epicentre being the "Coral Triangle" which is located around South East Asia and Papua New Guinea. The 'Coral Triangle' and the Indo-Pacific region have been identified as one of the most important global conservation priorities. Thus, efforts to conserve the WIO region marine ecosystems also contribute to the current efforts towards the conservation of the global marine ecosystems.

A high diversity of species and communities exists in the waters of the WIO Region[13]. By 2005, over 11,200 marine species had been recorded from the western Indian Ocean region including island states but this is estimated to be less than 50% of the marine species that are actually present[14]. Most of the WIO region falls into the Tropical Western Indian Ocean biogeographical region and is characterised by Indo-Pacific biota. The subtropical East Coast Province starts in southern Mozambique and extends to the Eastern Cape of South Africa. The biodiversity includes a total of 37 marine mammal species and five species of sea turtle. Eleven seabird families occur as breeding species within the geographical scope of the western Indian Ocean. By global standards, marine endemism in the WIO region is very high, at 22%, compared to 13% in the Red Sea and 6% in the Eastern Indian Ocean.

The region's marine biological diversity consisting of over 11,200 marine species is among the highest in the world, with 60- 70% of which are found only in the Indo-Pacific Ocean, with Comoros, Madagascar and South Africa being home to endemic or rare or threatened species. This includes rare and endangered species such as the coelacanths. The region also provides globally significant habitat for a large numbers of endangered and threatened species such as dugong, five of the world's seven species of marine turtle, whales, sharks, and groupers.

There are at least 200 species of corals. The fringing coral reefs and reefs surrounding the islands include the Aldabra Atoll (Seychelles), one of the most spectacular reefs in the world which is designated as a World Heritage Site. There are 11 species of mangroves covering 12,000 km^2 and 12 species of seagrasses together with over 1,500 species of fish, 3,000 species of molluscs, 450 species of crabs, and 300 species of echinoderm[1516].

Ecosystem Services value: The Western Indian Ocean region is considered to be one of the least ecologically disturbed areas of the global oceans. Coral reefs[17], mangroves and seagrass beds[18] are important habitats in the region providing habitat and other ecosystem services for a variety of species and for coastal human populations which depend on them for food, livelihoods. These and other habitats such as coastal forests, sand dunes, beached, and rocky shores support rich and

[13]Sheppard, C.R.C. 2000. Coral reefs of the Western Indian Ocean: An overview. *In*: McClanahan, T.R., Sheppard, C.R.C. and Obura, D.O. (eds.) *Coral Reefs of the Indian Ocean their ecology and Conservation*. Oxford University Press.525 pp.ISBN 0-19-512596-7.

[14] Richmond, M.D. 2001. The marine biodiversity of the western Indian Ocean and its biogeography: How much do we know? p. 241-262. In: Richmond M.D. & Francis, J. (eds.) *Marine Science Development in Tanzania and Eastern Africa*. Proceedings of the 20th Anniversary Conference on Advances in Marine Science in Tanzania.28 June - 1 July, 1999, Zanzibar, Tanzania.IMS/WIOMSA.569 pp.

[15]WWF, 2006.The Eastern Africa Coastal Forests Ecoregion. Strategic Framework for Conservation: 2005 – 2025. WWF-EARPO, Nairobi.

[16]WWF, 2004. The Eastern African Marine Ecoregion Vision: A large scale conservation approach to the management of biodiversity. WWF: Dar es Salaam, Tanzania. 53 pp.

[17]Sheppard, C.R.C. and Obura, D.O. *(eds)*. Coral reefs of the Indian Ocean – their ecology and conservation. Oxford University Press, Oxford: 3-38.

[18] Bandeira S.O. and Bjork, M. 2001. Seagrass research in eastern Africa region: emphasis to diversity, ecology and ecophysiology. *South Afr. J Bot*. **67**: 420-425.

complex populations of marine species that rely on the integrity of the various ecosystems for their health[19].

The ecosystem goods and services provided by the coral reefs in the WIO region alone are estimated to be more than US$7 billion per year, while that of mangroves is close to US$9 billion per year[20].

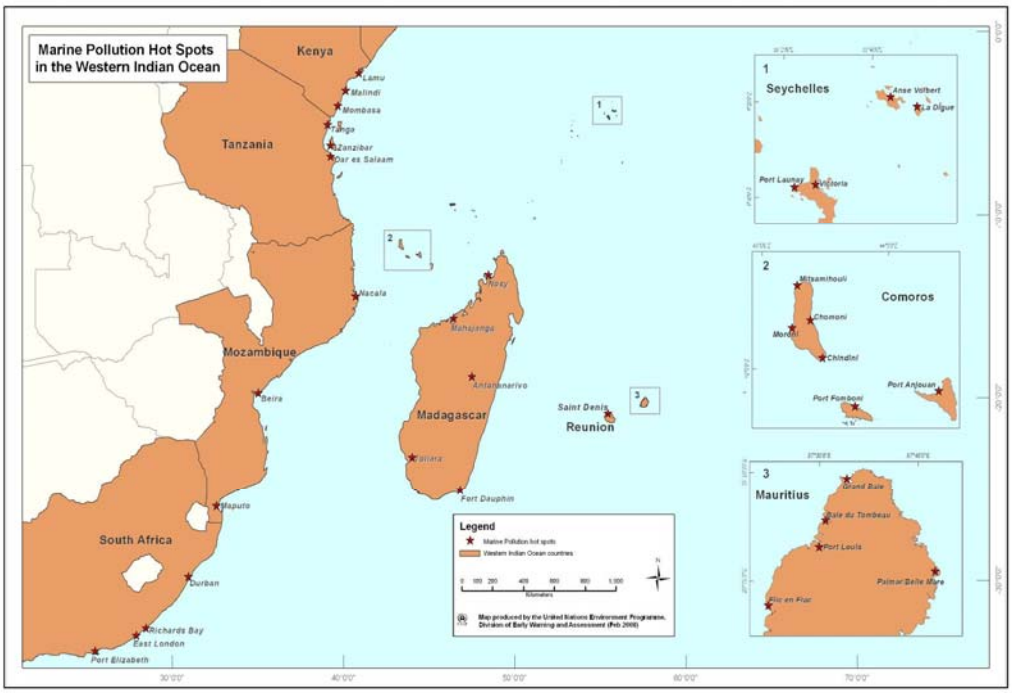

Figure 2:*'Hotspots' of land-based sources of marine pollution in the WIO region*

A comprehensive cost-benefit analysis estimated that over US$22 billion a year is derived from the coastal and marine resources of the region. Coastal tourism was found to make the largest contribution to GDP at over USD 11 billion a year, equivalent to 40% of the total from marine and coastal resources. Agriculture and forestry were next at 20% of the combined contribution, followed by mining and energy at 15% and fisheries at 11%. The fisheries generate a resource rent estimated at approximately USD 68 million per year, of which about USD 59 million are generated by WIO countries and the remainder by countries outside of the region[21].

Although these figures are considered estimates of the actual economic value of the coastal and marine ecosystems in the WIO region, in view of paucity of data in most of the participating countries, they provide an indication of the importance of the coastal and marine ecosystems in the region.

Climate change mitigation: The WIO region also has a large stock of carbon stored in estuaries, coastal forests, mangroves, seagrass beds and coral reef which play an important role in mitigating

[19] McCallister, D.E., Schueler, F.W., Roberts, C.M. and Hawkins, J.P. 1993. Mapping and GIS analysis of the global distribution of coral reef fishes on an equal area grid. *In*: Miller, R. (ed.) *Mapping the Diversity of Nature*. London: Chapman and Hall.

[20] UNEP/Nairobi Convention Secretariat, WIOMSA (2009a): Transboundary Diagnostic Analysis of Land Based Sources and Activities Affecting the Western Indian Ocean Coastal and Marine Environment, UNEP, Nairobi Kenya, 378p.

[21]ASCLME/SWIOFP 2012. Transboundary Diagnostic Analysis for the western Indian Ocean. Volume 1: Baseline.

climate change. The capacity of mangroves, seagrasses and salt marshes to store carbon has become largely recognised[22]. Mangroves, salt marshes and seagrasses form much of the earth's blue carbon sinks. They store a comparable amount of carbon a year to that of all other plant biomass on land. Indeed, by one estimate the maximum reported carbon sink capacity of salt marsh, mangrove and seagrass ecosystems exceeds by 10-, 6- and 2-fold that of undisturbed Amazonian forest[23].

Avoiding release of such large quantity of carbon through better protection and conservation of the coastal and marine ecosystems will largely contribute to the mitigation of global climate change.

Human and Economic value: The WIO Region is visited by more than 20 million tourists per year and coastal tourism is one of the major sources of foreign exchange contributing over US$11 billion per year, which is equivalent to 40% of the total GDP in the region. The tourism industry is substantially linked to the coastal and marine environment and hence degradation of the latter has a potential of reversing gains made by countries in the tourism industry. The WIO region generates more than 4 million tonnes of fish per year, produced by fisheries ranging from traditional subsistence and artisanal activities using a wide variety of different gears, to large-scale industrial operations fishing mainly with longlines, purse seines and trawling. It is estimated that the region contributes over 4% of global marine fisheries production. In particular the coastal and marine waters of the WIO, including estuaries and continental shelves are also important fishing grounds that supports directly or indirectly, the livelihood systems of people who live within the coastal zone. The protection of the region from land-based sources and activities is therefore vital for the sustainability of tourism and fishing industry which are important pillars of economies of countries in the region. There is however a need to carry out comprehensive economic valuation of goods and services provided by the coastal and marine ecosystems in the region including the determination of benefits that can be accrued to the fisheries sector through better protection of coastal and marine habitats.

Over 160 million people reside in the WIO countries and over 55 million of them live within 100km of the coast[24]. Although variable from place to place, there is a high reliance on coastal and marine ecosystems for food security and livelihoods in general. Because of their high dependence and limited ecosystem resilience, environmental variability and extreme events have a disproportionately severe effect on dependent coastal communities. Further, coastal cities and settlements are growing at a rapid rate. Tourism, fisheries, coastal agriculture, mining, mariculture, and ports and coastal transport are the main sources of livelihoods in the region and these to some extent are linked to the sustainability of coastal and marine ecosystems. The relative contribution of each of these sectors and their specific characteristics vary from country to country but there are important similarities and common themes across the region. Notwithstanding constraints, there are a number of opportunities for sustainable development of the coastal areas in the region. Regional initiatives such as the one demonstrated by this project are required to catalyse action on the ground by consolidating effort of various stakeholders at local, national and regional levels.

Major rivers draining into the Western Indian Ocean are sources of nutrients and terrigenous sediments that are considered important in sustaining the productivity of coastal and marine ecosystems in the region. This is demonstrated by the fact that coastal areas into which the major rivers in the WIO Region discharge are usually characterised by high biological productivity and are major fishing grounds. Examples include Sofala banks in Mozambique that is drained by Maputo and Incomati rivers, Natal banks in South Africa that is drained by the Limpopo, Save, Zambezi rivers,

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[22]Adame, M.F., Kauffman, J.B., Medina, I., Gamboa, J.N., Torres, O., Caamal, J.P., Reza, M. and Herrera-Silveira, J.A. 2013.*Carbon stocks of tropical coastal wetlands within the Karstic landscape of the Mexican Caribbean*. PLoS ONE.**8**(2): 1-13

[23]Donato, D.C., Kauffman, J.B., Murdiyarso, D., Kurnianto, S., Stidham, M. and Kanninen, M. 2011.*Mangroves among the most carbon-rich forests in the tropics.* Nature Geoscience **4**: 293-297

[24] World Resources Institute (2007): The Value of Coastal Ecosystems. http://www.earthtrends.wri.org/ updates/node/118.

Ungwana Bay in Kenya that is drained by the Tana and Athi-Sabaki rivers, Rufiji seascape in Tanzania which is drained by Rufiji river, among others.

The relatively pristine nature of much of the WIO region combined with the transboundary nature of coastal and marine ecosystems and the root causes of their degradation that are also transboundary in nature, presents an opportunity to the governments of countries in the region and their conservation partners to jointly implement strategies of protecting the coastal and marine ecosystems so that these ecosystems are able to continue providing essential goods and services on sustainable basis. Continued degradation of the region's valuable and productive coastal and marine resources will impair the regions socio-economic development goals and reduce global benefits while concerted management effort will contribute substantially to poverty alleviation through sustainable livelihoods and economic development.

2.3 Threats, Root Causes and Barrier Analysis

Overview of threats

As outlined in the WIO-LaB Transboundary Diagnostic Analysis (TDA) and SAP, although the WIO region is still one of the least ecologically disturbed areas of the world, it is increasingly threatened. In the last decade, the region's coastal and marine environment has started showing signs of degradation, attributed to both natural factors (e.g. climate change/variability leading to coral bleaching, sea level rise, flooding etc.) and a variety of anthropogenic activities, acting at different intensities and in various combinations.

The coastal zone of the WIO region is the site of most major cities, harbours, industries and other socio-economic infrastructure that increasingly affects the marine environment. As outlined above more than 55 million people inhabit the coastal zones of the region, although the overall population density of the region as a whole is not remarkably high. Densities are lowest in the mainland countries and Madagascar, ranging from as low as 14 people per square kilometre in Somalia to 64 in Kenya, while in the small island states densities are considerably higher, varying between a minimum of 290 in Comoros and a maximum of 618 in Mauritius (World Bank, 2009). Pressures associated with urbanization are most marked in the mainland states, where major cities like Mombasa (Kenya), Dar es Salaam (Tanzania), Maputo (Mozambique) and Durban (South Africa) are located, supporting populations of 2 to 4 million each.

In some key hot spot areas, pollution from domestic, industrial and agricultural sources is causing the degradation of water and sediment quality, resulting in loss of biological diversity, human health problems and a reduction in fish stocks and catches. Due to the increasing population pressures and the absence of alternative resources to sustain the local populations, resource extraction is becoming unsustainable and, in some areas, coastal habitats have been converted to other uses such as agriculture, aquaculture, ports/harbours and urban settlements.

Such developments are leading to the destruction of vital coastal habitats, such as mangrove forests, sand dunes, seagrass beds and coral reefs, as well as the physical alteration of the coastline (both erosion and accretion) due to the loss of the natural coastal protection and regulation functions of coastal habitats. Furthermore, over-fishing and unsustainable fishing practices (including dynamite fishing, the use of drag-nets, etc.) have in many areas resulted in a decline of fisheries resources and consequently, fish harvests.

Evidently, the natural systems of the WIO region are under increasing pressure from unregulated human activities as well as climate change, which collectively threatens their ability to support livelihoods and human health. Although many pristine areas remain in substantial parts of the WIO region, this growing pressure on natural resources has the potential to cause serious degradation to the coastal and marine environment.

If left unchecked, this degradation will erode socio-economic development gains, magnify problems associated with increased poverty, food shortages, ill-health and eventually also compromise social stability and security in countries in the region, some of which are listed among the least developed countries in the world.

Several of the estuaries in the WIO region are known to be experiencing stress due to land-based activities upstream and are thus less able to provide the ecosystem services upon which communities depend. In addition to climatic variability and/or change, the principal drivers of environmental change in river basins in the region include agricultural development, urbanisation, deforestation, river damming and industrialisation.

As outlined in the WIO-LaB TDA and SAP, these threats and impacts can be grouped into three main categories, as follows:

- Problem Area 1: Physical alteration and destruction of habitats.
- Problem Area 2: Water and sediment quality deterioration due to pollution.
- Problem Area 3: Alteration in freshwater flows and sediment loads from rivers.
- The WIO-SAP project is designed to address Problem Areas 1, 2 and 3.

The WIO-LaB TDA and SAP also list a fourth problem area relating to governance and awareness, although for this Project proposal this is treated under the root causes and barriers in the next section.

Root Causes Analysis

The TDA that was prepared under the UNEP-GEF WIO-LaB Project provides a scientific and technical synthesis of the threats and root causes of the degradation of the coastal and marine ecosystems in the region. As a result, there is now a regional consensus on threats, root causes of the degradation of the coastal and marine ecosystems in the WIO Region. There is also a consensus on the main barriers for the conservation of the coastal and marine ecosystems. This consensus has been affirmed by the participating countries through the adoption of the SAP. Specifically, the WIO-LaB TDA grouped the challenges in the protection of the coastal and marine ecosystems under four broad strategic components, namely: (i) coastal habitats, (ii) water quality, (iii) river flows as well as (iv) governance and awareness. Within each component, the specific threats and root causes were identified. The WIO-LaB SAP process identified a range of options to address the root causes of coastal and marine ecosystem degradation (Table 3). However, it is important to note that while some key root causes such as population pressure, poverty and climate change cannot be directly addressed by the project, the outcomes of WIOSAP project investment targeting other root causes and threats will have moderating effect on the influences of population pressure, poverty and climate change. The TDA identified the following the major threats and root causes of the degradation of the coastal and marine environment in the WIO region:

Population pressure - Population growth and expansion in coastal areas is one of the fundamental root causes of the degradation of the coastal and marine ecosystems in the WIO region. This is mainly as a result of increased demand for coastal natural resources including high demand for coastal space for expansion of human settlements, tourism and agriculture. The rapid urbanisation with changes in lifestyles characterised by high consumption rates is considered to be a major threat in that it has resulted in increased production of both liquid and solid wastes most of which are dumped in sensitive coastal areas. All of the countries in the WIO region have in the recent past experienced rapid population growth and urbanisation in coastal areas, particularly within the larger coastal cities

such as Port Victoria, Port Louis, Toliara, Durban, Maputo, Dar es Salaam and Mombasa. This has led to an increase in the generation of municipal wastewaters including sewage and industrial effluents. Population growth has also led to increased demand for ecosystem goods and services leading to over-exploitation of resources, the result of which has been the degradation of coastal ecosystems.

Poverty and inequality - The WIO region is characterised by some of the highest poverty levels in the world based the estimated per capita income for different countries as provided in Table 2. High poverty levels have led to high dependency on the coastal and marine ecosystems as the main source of livelihood and income. Limited sources of livelihood have in turn led to over exploitation of the available natural resources. Also, lack of financial resources is considered to be one of the main reasons for lack of appropriate waste management facilities in many of the countries in the region leading to disposal of untreated liquid and solid wastes directly to the sea. Lack of financial resources has also led to weak institutions lacking implementation capability, with the result that discharge of municipal wastes as well as industrial effluents is not sufficiently controlled in most of the countries.

Climate change and variability- Climate change and variability in the WIO region is already altering weather patterns and in the recent past episodes of coral bleaching[25][26]have increased in frequency due to increasing seas surface temperatures (SSTs). Also, the intensity of extreme weather events such as droughts and floods have increased in the recent past altering the hydrology of river systems and in some cases further widening the range of river flow to the coast. Other impacts have been felt mangroves and seagrass beds some of which have been smothered by heavy sedimentation associated with high flood events, such as those associated with El-Nino Southern Ocean (ENSO) phenomena. The degradation of the coastal and marine waters as from land based sources and activities is being compounded by climate change and variability. The global warming is leading to relatively warmer seas which consequently modifies marine ecosystems by causing shifts in the range of key marine species that supports coastal fisheries in the region. Several countries in the region are considered highly vulnerable to climate change risks, particularly Mozambique, Madagascar and the island states of Comoros, Seychelles, Mauritius and French Reunion.

Economic drivers- Most countries in the WIO Region are experiencing rapid economic growth characterised by the expansion of urban centres including commerce, tourism, agriculture and industrial activities. There is high demand for ecosystem goods and services to meet local and export market needs and already there are indications that capacity of coastal and marine ecosystems to continue to provide essential goods and services including global benefits, is rapidly declining. High poverty levels have also increased dependency on coastal natural resources resulting in over-exploitation of the available natural resources. Also, in the recent past, there has been increased damming of the rivers for hydropower generation occasioned by increased demand for energy as a result of intensification of economic activities in participating countries. Dams have also been constructed to meet the increased water demands for irrigation agriculture and water supply for rapidly expanding rural and urban centres. In most river basins, there has also been high rates of deforestation to open land for agriculture and settlement. In most basins, inappropriate land use practices have increased soil erosion resulting in high sediment load of rivers which has smothered mangroves, seagrass beds and degraded coral reefs in many coastal areas. In general, rapid and poorly planned developments in most of the river basins in the WIO Region have led to the modification and/or alteration of the hydrologic characteristics of rivers with significant impacts at the coast. The impacts associated with economic drivers have been compounded by the impacts due to climate change, particularly the increased frequency of extreme hydrologic events such as floods and droughts.

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[25]Obura, D.O (2005): Resilience and climate change: Lessons from coral reefs and bleaching in the Western Indian Ocean. *Est. Coast. Shelf Sci.* **62**: 353-372.

[26]Hoegh-Guldberg, O (1999): Climate change, coral bleaching and the future of the world's coral reefs. *Marine and Freshwater Research*.**50**: 839–866.

There are a number of barriers that are impeding successful protection and or conservation of the coastal and marine ecosystems in the WIO Region. These barriers include the following:

Inadequate Governance[27] - Governance sets the stage within which management occurs (UNEP, 2006). Based on the assessment of governance of marine pollution in the WIO region undertaken under the auspices of the WIO-LaB Project, it emerged that most of the countries in the WIO Region have significant challenges with regard to the management of the coastal and marine ecosystems. Important building blocks for effective governance of coastal and marine environment are lacking and there is high level of inefficiency in as far as the management of coastal and marine environment is concerned. Most countries are characterised by weak policy, legal, regulatory and institutional frameworks, weak or limited enforcement mechanisms and limited intersectoral coordination for effective management of the coastal and marine ecosystems, including for adequate rent capture from extractive industries. Some countries lack appropriate legislation and or regulations. Also, industry associations and public watchdog groups are embryonic with little or no influence on policy formulation processes. In most countries, coastal and marine critical ecosystems and their biodiversity are protected under national law but the regulations and enforcement mechanisms are often inadequate or weak due to lack of financial and political commitment from the governments. In most cases capacity for enforcement of appropriate legislation at the local level is often weak or absent altogether. Also, local communities lack appropriate knowledge and consequently are not involved in management of coastal and marine biodiversity. This situation is compounded by the limited resources and capacity for effective monitoring/patrols and law enforcement.

Despite the creation of national institutions and the enactment of national laws, supported by international conventions, the management of the coastal and marine environment in the WIO region is still challenging. While most countries in the region have put in place policy, legal, regulatory and institutional frameworks that are relevant to the protection and management of the coastal and marine environment, many have not succeeded in reversing the trend of degradation of coastal and marine ecosystems.

Coastal zone users are diverse in nature, and come from various economic sectors such as fisheries and aquaculture, agriculture, forestry, tourism, mining, manufacturing industry, transport and energy, as well as coastal development and urbanisation sectors. Traditionally, the governance of these sectors was based on a sectoral approach, with each sector managed separately through dedicated legal/regulatory, institutional and policy frameworks. It is therefore not surprising that a primary root cause of governance ineffectiveness in the WIO region is related to a lack of coordination of administrative decisions affecting the management of coastal and marine natural resources.

A key conclusion from the governance analysis undertaken as part of the TDA is that crosscutting governance instruments and tools need to be developed and promoted to meet the unique challenges in the coastal zone. Such instruments and tools are based on the application of Ecosystem-Based Management Approaches (EBM), including Integrated Coastal Zone Management (ICZM), Environmental Impact Assessment (EIA), Strategic Environmental Assessment (SEA), and Marine Protected Areas (MPAs). A positive development is that virtually all WIO countries have to a certain extent commenced, or at least considered the application of such instruments and tools in their areas of jurisdiction. However, there is still need to build capacity at the country level in these areas. Furthermore, as many of the impacts related to land-based sources and activities are transboundary in nature, efforts should be focused on harmonizing and adopting legislative frameworks at the regional level.

[27] UNEP/Nairobi Convention Secretariat (2009): Regional synthesis report on the Status of Ratification and Implementation of International Environmental Conventions relevant to Land-based Activities and Sources of Pollution of the Coastal and Marine Environment of the WIO region.53 p.

Finally, the socio-economic importance of the coastal and marine environment in the WIO region is rarely considered in national policy formulation. Consequently, destructive activities are often not regulated or costed and in certain instances results in damage to critical habitats. The devastating socio-economic consequences of such damages are hardly communicated to policy makers or to the public. As a result, socio-economic importance of the coastal and marine environment and their governance is given low priority in the national planning processes, including budgetary allocations.

Inadequate information and awareness– In most of the participating countries, the importance of the coastal and marine environment has not been quantified and there is low level of awareness among the policy makers on the true value of the coastal and marine ecosystems goods and services. As a consequence, the contributions of the natural blue capital considered as a priority in national policy formulation, national planning and budgetary processes is not taken into consideration. In addition, there is limited exchange of information or collaboration on conservation issues at local, national and regional levels. Information on the status, extent and long-term trends of coastal ecosystems in the WIO region is often limited or absent thus constraining decision-making processes including also packaging conservation interventions. Provision of appropriately packaged information to local communities, natural resource managers and policy makers is important for effective conservation of the critical coastal and marine habitats in the WIO Region. Empowerment of coastal communities through provision of appropriate information is also considered a key factor in the alleviation of poverty. This subsequently allows coastal communities to play a greater and an active role in governance of coastal and marine natural resources. Within most of countries of the WIO region, the communities lack knowledge on matters such as:

- Environmental impacts and socio-economic consequences of human activities that, in many instances, are affecting people's own quality of life.
- Technologies and techniques to prevent or minimize the impact on environment and the goods and services that are provided. Examples include technologies for municipal wastewater treatment, solid waste management, appropriate fishing and agricultural practices.
- Existing policies, legislation, regulations and institutional structures that provide ways of preventing or mitigating impacts on the environment and socio-economic well-being of people.

Thus, provision of knowledge and awareness creation to local communities and decision-makers in participating countries is essential. This project will fill the existing gap through science-policy forums, preparation of policy briefs on key coastal and marine issues including dissemination of the results of economic valuation studies.

Inadequate Financial Resources- Most countries in the WIO region lack adequate financial resources to facilitate adoption of appropriate technologies and practices for preventing environmental impacts and/or socio-economic consequences of human activities in the marine environment. Most of the public institutions responsible for the environment are limited by low budgetary allocations from the central government. Low budgetary allocations are partly due to lack of willingness and commitment by policy makers to address coastal and marine environmental issues, ostensibly due to lack of knowledge on the importance of coastal and marine ecosystems. Also, coastal and marine environment is not accorded appropriate priority (especially by the continental states) as compared to terrestrial ecosystems whose benefits are easily demonstrable to the policy makers. The consequences of lack of financial resources has been weak enforcement of legislation/regulations, weak monitoring of the state of the coastal and marine ecosystems, lack of implementation of conservation interventions, and overall, decline in the state of the coastal and marine ecosystems.

Lack of alternative livelihood systems: Most coastal communities have limited livelihood alternatives with the consequence that there is over-dependency of few available alternatives. Most of the key sources of livelihood are directly or indirectly linked to coastal and marine ecosystems. Increasing population in the face of limited livelihood alternatives has led to over-exploitation of coastal and marine natural resources leading to loss of valuable ecosystem functions. The development of other

livelihood alternatives for the local coastal communities is considered important in that it will reduce pressure on the coastal and marine ecosystems.

Lack of institutional capacity and effective policy frameworks: Most of the participating countries have policies and strategies that are relevant to the protection of the coastal and marine habitats. However, effective conservation has not been realized in the region due to lack of capacity for implementation. Most of the government institutions and agencies that have mandate on the environment are under-staffed and under-funded, and despite inherent capacity limitations, are still expected to deal with a broad range of issues including water management, climate change, forestry and fisheries, as well as biodiversity conservation. The management of coastal and marine habitats is generally afforded low priority due to the fact that their ecological and economic roles are poorly understood at national and local levels, particularly for the continental states. At the regional level, the mechanisms do exist in the form of Nairobi Convention to ensure regional collaboration and joint action for the conservation of mangroves, seagrass, meadows and coral reef ecosystems. However, such mechanisms are not adequately integrated into national policy formulation frameworks.

Poor local and national development planning: Poor planning and inappropriate land use practices in most of the participating countries has led to degradation of mangroves, seagrass meadows and coral reefs, both directly and indirectly. In most of countries in the WIO region, for example, there has been a significant increase in the coastal population and coastal land developments for housing and tourist facilities, which have impacted the critical coastal habitats. Although, Environmental Impact Assessment (EIA) legislation has been introduced in most countries in the region, its effectiveness in reversing the degradation of the coastal and marine habitats has been limited due to various capacity related challenges and corruption. An overview of the main constraints in LBSA governance identified in the TDA is presented in Table 3 below.

Table 3: **Summary of common weaknesses in governance of land based sources and activities in the WIO region**

Governance Weaknesses	**Description**
Policy and legislative inadequacies	Inadequate updating, implementation, enforcement and monitoring of relevant legislation Inadequate ratification and 'domestication' of relevant international and regional instruments
Limited institutional capacity	Weak mechanisms for effective inter-sectoral coordination and governance Inadequate human resources and technical capacity in institutions charged with the responsibility of addressing LBSA-related issues
Inadequate awareness	Inadequate awareness, knowledge, understanding and appreciation of the economic value of coastal/marine ecosystem goods and services among policy makers and legislators, the civil society and the private sector
Inadequate financial mechanisms	Inadequate financial mechanisms and resources for dealing with LBSA-related issues, including recovery of user charges, lack of benefit sharing mechanism.
Poor knowledge management	Lack of adequate scientific and socio-economic data and information to support policy making, monitoring and enforcement

Source: WIO-LaB TDA and SAP (2010)

2.4 Institutional, Sectoral and Policy Context

The institutional, sectoral and policy context applicable to the protection and conservation of the coastal and marine environment in the WIO Region under this project operates at international, regional and national levels.

The WIO-LaB SAP[28] identifies 29 activities across the 4 targets areas. Within each activity, short (5-year), medium (10-15 year) and long-term (25 year) objectives were set out. The SAP activities are characterised in terms of the following generic steps: (i) establishment of standards and best practices; (ii) mainstreaming of standards and approaches and enhancement of public, government and business awareness on the need to apply them, and (iii) demonstration of the value and application of the standards and best practices through pilot in-country interventions and similar initiatives. Being a regional consensus, the SAP is less prescriptive on how these processes will be managed and financed and in particular how the political will for investments in coastal and marine ecosystem health can be generated. The latter is seen as a significant barrier which would be directly addressed in the course of the project implementation. The SAP however, anticipated three overlapping and mutually-supporting phases: a catalytic phase; a mainstreaming phase; and a consolidation and long-term sustainability phase. The proposed WIOSAP project is essentially catalytic and mainstreaming phase, but with a strong emphasis on the institutional and financial sustainability of environmental reforms at the national level.

Across the full suite of physical targets (coastal habitats, water quality, river flows), the WIO-LaB TDA identified four key activities to address these threats: (i) monitoring and assessment; (ii) effective use of good governance and environmental management tools; (iii) communication and awareness and (iv) capacity building and regional collaboration. The approved PIF (ref. 4940) organised the project components in accordance with the physical targets identified in the SAP (coastal habitats, water quality, river flows, governance and awareness creation). However, the STAP review urged that the project engage the synergies and opportunities available at national and regional levels across the proposed components as the key barriers such as inadequate finance, perverse incentives and weak governance, are common across the physical targets and the key actors such as environment or water ministries and local councils, tend to be common across the physical targets.

Global level

The principal international multi-lateral environmental agreements (MEAs) relevant to the project and the conservation of the critical coastal and marine habitats in the WIO region are: the Convention on Biological Diversity (CBD) concerning coastal ecosystem services and biodiversity conservation and the United Nations Framework for Climate Change Convention (UNFCCC) Cancun Agreement concerning climate change mitigation targets. The UN Convention to Combat Desertification (UNCCD), the Ramsar Convention on Wetlands and the Convention on the Conservation of Migratory Species of Wild Animals (CMS).The United Nations Framework for Climate Change Convention (UNFCCC) is considered particularly important in view of the role that the coastal and marine ecosystems in the region play in mitigating climate by storing a large quantity of carbon stock. Most of the countries in the region are party to the climate change convention and the implementation of this project would be considered important in the realization of the goals of UNFCCC.

The International Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC) is also relevant to the WIOSAP Project since the convention aims at establishing measures for dealing with marine oil pollution incidents (including hazardous and noxious substances) nationally and in co-operation with other countries. Most of the countries in the WIO Region are party to the convention. In accordance with the OPRC Convention and its Annex, the contracting parties are required to undertake, individually or jointly all appropriate measures to prepare for and respond to oil pollution incidents.

[28] UNEP/Nairobi Convention Secretariat, WIOMSA (2009): Strategic Action Programme for the Protection of the Coastal and Marine Environment of the Western Indian Ocean from Land Based Sources and Activities, UNEP, Nairobi Kenya, 156p.

The countries participating in the implementation of the WIOSAP project are also parties to the 1982 United Nations Convention on the Law of the Sea (UNCLOS) which includes global commitments to address marine pollution. The project addresses Part XII (Articles 192 to 237) of UNCLOS which is devoted to "Protection and Preservation of the Marine Environment" and in which the states are obligated to 'protect and preserve the marine environment and take measures that are necessary to prevent, reduce and control pollution of the marine environment'. The project more specifically addresses Article 207 that deals with "Pollution from Land-based Sources", and that provides that 'states shall adopt laws and regulations to prevent, reduce and control pollution of the marine environment from land-based sources, including rivers, estuaries, pipelines and outfall structures, taking into account internationally agreed rules, standards and recommended practices and procedures', among others. Table 4 below shows the extent to which countries participating in the project have ratified the above agreements relevant to the conservation of the coastal and marine critical habitats.

The UN Convention on the Law of the Non-Navigational Uses of International Watercourses 1997 (the 'International Watercourses Convention') is also relevant to the project. The International Watercourses Convention is particularly relevant to the five terrestrial WIO countries given the aridity of the region and the likelihood that the problems associated with drought, PADH and so on, are likely to be exacerbated by climate change. The Convention obliges watercourse states to protect, preserve, and manage international watercourses and their waters (Article 1(1)), and specifically to protect and preserve watercourse ecosystems (Article 20). It defines 'watercourse' as "a system of surface waters and ground waters constituting by virtue of their physical relationship a unitary whole and normally flowing in a common terminus"; an 'international watercourse' is defined as "a watercourse, parts of which are situated in different states"(Articles 2(a) & (b)). Article 3 of the Convention encourages the adoption of watercourse agreements at a regional level and to this end a South African Development Community (SADC) Water Protocol, later a Revised Water Protocol, was adopted. The convention goes on to oblige states to prevent, reduce and control pollution, in particular in harmonising their policies. The measures advocated include setting joint water quality objectives and criteria, establishing techniques and practices to address pollution from point and non-point sources, and establishing lists of substances whose introduction is to be prohibited, limited, investigated or monitored (Article 21).

Table 4: Key conventions relevant to LBSAs and ratification status in each WIO country.

CONVENTION	KEN	TANZ	MOC	SA	SOM	COM	MAD	MAU	SEY	FRA
UNCLOS 1982	Yes	Yes	Yes	Yes	n/a	Yes	Yes	Yes	Yes	Yes
Watercourses 97	No	No	Yes	Yes	n/a	No	No	No	No	n/a
London 1972	Yes	Yes	Yes	Yes	n/a	Yes	Yes	Yes	Yes	Yes
MARPOL 73/78	Yes	Yes	Yes	Yes	n/a	Yes	Yes	Yes	Yes	Yes
CBD 1992	Yes	Yes	Yes	Yes	n/a	Yes	Yes	Yes	Yes	Yes
Stockholm 2001	Yes	Yes	Yes	Yes	n/a	No	Yes	Yes	Yes	Yes
Rotterdam 1998	Yes	No	No	Yes	n/a	No	Yes	-	Yes	Yes
Nairobi 1985	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
African Nature 1968/2003	Signed	Signed	Signed	Yes	n/a	Yes	Yes	Yes	Yes	Yes

The UNEP's Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA) is also an important global programme through which the proposed project secretariat has a specific policy and legal mandate. The GPA draws its legal context primarily from Article 207 of UNCLOS and it is essentially an institutional-strengthening, technical-assistance and capacity-building programme. The GPA works through the existing UNEP Regional Seas Conventions and Action Plans to develop regional and national level action plans to protect the marine environment from land-based activities. The WIO-LaB project was considered to be a regional demonstration project of the GPA and the development of the LBSA Protocol and SAP and national action plans in participating countries were undertaken jointly with the GPA. The WIOSAP

will therefore collaborate with GPA to consolidate experiences and lessons learnt in the implementation of the WIO-LaB Project. The GPA has identified at least nine pollutant or source categories across most of the UNEP's Regional Seas Programmes. Many of these source categories are also manifested in the WIO region and are described in the respective problem areas in section 5.2. Briefly, these include: municipal wastewater, heavy metals, litter, nutrients, oil, physical alterations and destruction of habitats (PADH), sediment mobilization and persistent organic pollutants (POPs).

The main international and regional inter-governmental frameworks and institutions that are directly relevant to land-based sources in the WIO region include:

- Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972 ("London Convention")
- Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (1972), 1996.
- International Convention for the Prevention of Pollution from Ships (1973/78). ("Marpol Convention")
- Convention on Biological Diversity, 1992 ("CBD Convention")
- Convention on Persistent Organic Pollutants, 2001 ("Stockholm Convention")
- Convention on the Prior Informed Consent Procedure for certain Hazardous Chemicals and Pesticides in International Trade, 1998 ("Rotterdam Convention")
- African Convention on Conservation of Nature and Natural Resources, 1968 ("Algiers Convention")
- The United Nations Framework for Climate Change Convention (UNFCCC)
- The Convention on Migratory Species ('Bonn Convention')
- The UN Convention to Combat Desertification (UNCCD)

The international conventions described above embrace a broad range of issues and responsibilities, that would ensure sustainable utilization of the marine and al resources of the WIO region. However, accession to the terms and responsibilities of and thus signatory to the conventions is not uniform throughout the region, though in general there is widespread inclusion (see Table 4). The project is also consistent with the goals of the 2002 World Summit on Sustainable Development (WSSD) and Johannesburg Plan of Implementation (JPOI). The WSSD Plan of Implementation (JPOI) includes provisions focussed on the oceans, coasts and islands (Recommendations 30-36). The JPOI calls for effective reduction, prevention and control of waste and pollution and their health-related impacts by undertaking by 2004 initiatives aimed at implementing the GPA in small island developing states. This would include Mauritius, Seychelles and Comoros in the present case.

The project also draws its institutional, sectoral and policy context from two overarching UNEP Strategies, namely the UNEP Mid-term Strategy (MTS) (2014-2017) and the 2010 UNEP Marine and Coastal Strategy. The project is fully consistent with the following MTS strategic focus, namely: Ecosystem Management; Environmental Governance; Chemicals and Wastes. The project is fully aligned with all four objectives of the UNEP-MCS relating to: land-ocean connections, ecosystems for human well-being, reconciling use and conservation and vulnerable people and places. The project would be instrumental in the implementation of relevant resolution of the 2014 United National Environment Assembly (UNEA), particularly those on marine debris and micro plastic pollution, and ecosystem-based adaptation.

The project is also consistent with the goals of UNEPs' Regional Seas Programme which has several Regional Seas Conventions and Action Plans laying down a broadly uniform pattern of principles which have been adopted by a number of countries in the WIO region. The Regional Seas Programme adopted the Regional Seas Strategic Directions 2012-2017. Some countries have only included specific protocols on the prevention and combating of land-based sources of marine pollution. A good example is the 1985 Nairobi Convention and the 2010 LBSA Protocol.

At the global level, the WIOSAP project is also relevant to the implementation of the four UN Millennium Development Goals (MDGs) that are focused on ensuring environmental sustainability (through protecting coastal and marine resources and environments in the region), eradication of poverty and hunger (through protecting coastal and marine-based sources of food security and sustainable natural-resource based livelihoods), promotion of gender equity (through greater involvement of woman in developing and implementing key policies and actions), and global partnership (through strengthening governance and awareness to allow stakeholders to collaborate effectively in addressing transboundary challenges).

The United Nations is in the process of defining a post-2015 development agenda. This agenda will be launched in September 2015. This process has come up with a set of Sustainable Development Goals, which replace the MDGs. Of the 17 SDGs currently being considered for adoption, four are relevant to the WIO-SAP Project and they are: Ensure availability and sustainable management of water and sanitation for all (Goal 6); Make cities and human settlements inclusive, safe, resilient and sustainable (Goal 11); Take urgent action to combat climate change and its impacts (Goal 13) and Conserve and sustainably use the oceans, seas and marine resources for sustainable development (Goal 14).

The other global policy, institutional and legal mandate for the project also stems from other equally important multi-lateral environmental agreements such the Convention on Biological Biodiversity (CBD) and the United Nations Framework Convention on Climate Change (UNFCC). Other equally important global agreements that are considered relevant to this project include Barbados Programme of Action for the Sustainable Development of Small Island Developing States in view of participation of five WIO island states in the implementation of the WIOSAP Project. The WIOSAP Project will contribute in addressing the Small Islands Developing States Programme of Action (SIDS/POA) including the Mauritius Strategy (MSI) for the further Implementation of the SIDS/POA.

Regional level

The project will provide support to governments of participating countries in the WIO Region to achieve the objectives of the Nairobi Convention including also regional and global priorities identified under Agenda 21 (Chapters 17 and 18), the Convention on Biological Diversity, the Programme of Action for the Sustainable Development of Small Island Developing States (Barbados, 1994), the Pan-African Conference on Sustainable Integrated Coastal Management (Mozambique, 1998), the Arusha Resolution on Integrated Coastal Zone Management (ICZM) in Eastern Africa including the Island States (April, 1993), Seychelles Conference Statement on ICZM (October, 1996) and the Marine Turtle Conservation and Action Plan for the WIO region. The project will also complement the commitments identified within the Environmental Component of the New Partnership for Africa's Development (NEPAD) and in the process improve the capacity of national and regional institutions in the WIO Region. The project will also address the recommendations of the World Summit for Sustainable Development (WSSD), by fulfilling some of the requirements outlined in Paragraph 32 of the Implementation Plan for the WSSD.

The regional mandate for the WIOSAP project is drawn from the Nairobi Convention among other equally important regional agreements. All the participating countries are contracting parties to the Nairobi Convention and its protocols. The Nairobi Convention through the LBSA Protocol provides the overarching legal, institutional and policy framework for the project. The fact that all ten countries in the WIO Region have endorsed the WIOSAP project document provides an extremely important regional legal mandate for and political ownership of the project.

The project is also consistent with the vision and goals of the African Union's 2050 Africa's Integrated Maritime Strategy which is to foster wealth creation from Africa's oceans, seas and inland waterways by developing a maritime economy and realising the full potential of sea-based activities

in an environmentally sustainable manner. The AIM strategic action frameworks on fisheries and aquaculture, integrated marine tourism and leisure strategy for Africa, legal and regulatory regimes, maritime spatial planning, environmental and biodiversity monitoring, capacity and capability building, outreach activities, are particularly relevant to the WIOSAP Project. The project in particular addresses 2050 AIMS strategic objectives (ii) engage civil society and all other stakeholders to improve awareness on maritime issues, (iii) enhance political will at community, national, regional and continental levels, (vi) minimise environmental damage and expedite recovery from catastrophic events, (ix) improve Integrated Coastal Zone/Area Management in Africa, (x) promote the ratification, domestication and implementation of international legal instruments, and (xi) ensure synergies and coherence between sectoral policies within and between the RECs/RMs.

The project is also relevant to a number of regional river basin governance frameworks such as the 1987 Zambezi River System Agreement and the SADC Protocol on Shared Watercourses (SADC, 2000) that underpin regional arrangements for transboundary river basins. The regional river-basin governance frameworks also provide an important policy and institutional context for the complementary IUCN through its BRIDGE Africa whose goal is to enhance cooperation among riparian countries through applying water diplomacy at multiple levels, will further contribute to the realisation of the goals of WIOSAP project. The major river basin organisations include Zambezi River Basin Authority, Tana and Athi Rivers Development Authority, Rufiji Basin Development Authority, Limpopo River Basin Authority. The mandates of these organisations are normally broad ranging from coordination of development programmes to implementation of specific water resources management initiatives.

A number of Regional Economic Integration Agreements (REIAs) in the Southern and Eastern African region also provide relevant policy and institutional context for the WIOSAP project. The activities of the WIOSAP Project support the many of the goals of the main REIAs in the region such as the Southern African Development Community (SADC), the Indian Ocean Commission (IOC), the Common Market for Eastern and Southern Africa (COMESA) and the Eastern African Community (EAC), particularly the objectives of coordination, harmonisation, and rationalisation of policies and strategies for sustainable development in all areas of human endeavour including cooperation in the areas of natural resources and the environment.

The Indian Ocean Commission (IOC) is an important part of the institutional setting for the implementation of WIOSAP project in the five island states (Comoros, Madagascar, Mauritius and Seychelles and France. The IOC and the Nairobi Convention have signed MOU outlining and supporting cooperation activities that will include the implementation of the WIOSAP project activities on the development of an ICZM Protocol that is consistent with the objectives of IOC. This will provide an important policy, legal and institutional context for the WIOSAP project particularly for actions that will target the WIO island states.

The Contracting parties to the Nairobi Convention have in several decisions agreed and provided for partnerships with RECs. In Decision CP8/13 on enhancing cooperation, collaboration and support with Partners of 2015, the Contracting Parties, agreed to continue engaging and cooperating with existing partners for the development and implementation of the decisions of the Conference of Parties and the work programme of the Nairobi Convention including the establishments of partnerships, including with regional economic communities, such as the East Africa Community, Common Market for Eastern and Southern Africa, Southern Africa Development Community, Indian Ocean Commission and Regional Fisheries Management Organisations, such as the Indian Ocean Tuna Commission, South West Indian Fisheries Commission.

Further, the African Ministerial Conference on Environment (AMCEN), in their declaration of 15 March 2015, reiterated support for the regional seas programmes as regional platforms for the implementation of the Africa Integrated Marine Strategy 2050 and Agenda 2063 on Ecosystem-Based

Management Approaches for marine resources in the exclusive economic zones and adjacent waters. The RECs, have been identified as; (i) representing their respective regions on Agenda 2063 and are members of the Agenda 2063's Operational Steering Committee; (ii) and are required to adapt and align continental long /medium term objectives to their regional frameworks.

In this context, the Nairobi Convention acting as a regional platform for the implementation of the Africa Integrated Marine Strategy 2050 and Agenda 2063 on Ecosystem-Based Management Approaches for marine resources in the exclusive economic zones and adjacent waters for AMCEN, will engage with the regional RECs in their role as members of the Agenda 2063's Operational Steering Committee, under the AU umbrella to implement the WIOSAP project as part of the implementation of then Agenda 2063 with a requirement to report progress to AMCEN every two years.

National level

There is a rich policy, sectoral and institutional context for the WIOSAP project at the national level. The constitutional and legal frameworks of most of the participating countries have relevant provisions for the protection of the environment, which in most cases encompasses also coastal and marine environment. The constitution of several of the participating countries also includes provisions on the right to a clean environment. The African Charter on Human and Peoples' Rights, which is a regional treaty, has specific provisions on the right to a healthy environment in its Article 16. The inclusion of an environmental right in participating countries constitutions sets in place the overall environmental governance framework for individual countries.

The participating countries have also put in place framework environmental laws that includes basic environmental management principles such as the 'polluter pays' and 'precautionary' principles. In addition, the laws also include specific and all-important environmental impact assessment provisions. Such umbrella legislation also invariably establishes governmental environmental institutions and sets out their powers and objectives. Most WIO countries have enacted framework environmental legislation that are important for timely implementation of the WIOSAP Project.

Many of the WIO countries have also put in place effluent discharge standards many of which are incorporated in legislation or accompanying regulations to combat freshwater pollution. Some countries are developing environmental quality objectives and targets (EQO/Ts) for the coastal marine environment, based on the foundational work of the WIO-LaB Project and the LBSA Protocol. A diverse range of water quality and use legislation also exists with numerous institutions that are assigned the responsibility of ensuring water quality and thus implicitly coastal water quality.

A highly relevant national-level legal and policy framework for the WIOSAP project relates to Integrated Coastal Zone Management (ICZM). The principles of ICZM are already being adopted in the most of WIO countries and the WIOSAP activities on the development of ICZM Protocol will find relevancy and use in most of the participating countries. Most of the participating countries, in particular South Africa, Kenya and Tanzania, have formally moved towards developing policies, laws and institutions promoting ICZM. On the other hand, environmental management policies, laws and institutions in the small island states are by their nature all concerned with coastal and marine management issues to a greater or lesser degree. Although all the countries in the WIO Region have signed the LBSA Protocol, a number of them are yet to ratify it. Thus an activity is proposed to provide support to participating countries to ratify the LBSA Protocol and also take appropriate steps to implement the Protocol through integration into national legislations and processes. The protocol on protected areas, wild fauna and flora has implications for component A on critical coastal habitats.

The following section presents specific country-based background information focussing on institutional arrangements, legal and policy setting.

Somalia

Somalia has two major rivers, the Shabelle and Jubba Rivers, which originate in the Ethiopian highlands and flow through deep gorges in the Somali plateau and eventually into the coastal plain. The Shabelle River flows southwest and then flows parallel to the coast for a distance of 85km before forming a large swamp. However, during heavy rains, the Shabelle River breaks it banks and joins the Jubba River further south. The Jubba River flows perpendicular to the coast before discharging into the sea at Jumbo. The WWF Eastern Africa Marine Ecoregion programme identified Shebelle river mouth is one of the priority seascapes in the eastern coast of Africa.

Somalia has been without a central Government since 1991, when the Government of the time was overthrown. For eight year from 2004, Somalia was under the Transitional Government and with improvement of security particularly in the capital, Mogadishu and other major towns, the formal Government and Parliament was installed in 2012. Since then Somalia Government has regained its seat at the United Nations.

Coastal and marine environmental governance is generally very weak in Somalia due to the absence of a strong central government. There are few policies and legislation concerning the environment in Somalia, but the little that exists is mostly outdated. Although Somalia has in the past signed a number of regional and international Multilateral Environmental Agreements (MEAs), there has been little progress in their implementation domestically. There is also a lack of current data, information and knowledge on the current status of the coastal and marine environment.

Through the WIO SAP project, Somalia Government could be assisted to compile information on up-to-date status of its coastal and marine ecosystems and their resources and also to conduct an assessment of Juba-Shebele rivers.

Kenya

Kenya's coastline is 536 km with the continental shelf covering 8,460km^2. The coral reef, mangroves and seagrass ecosystems cover the surface area of 630, 610 and 34 km^2 respectively. The coastline is dominated by fringing coral reefs that often encloses shallow lagoons that are associated with seagrass beds. Kenya has two major rivers that drain into the WIO- the Tana and the Athi-Sabaki. The largest is the Tana River that discharges to the north in a relatively large delta with extensive mangrove forests. About 2.68 million equivalents to 8% of the total population live within 100km of the coast. The coastal and marine environment is considered important to the country. However, the contribution of the marine fishery to overall national fisheries production in Kenya is a modest 3-4 %. Marine landings average 7,000 tonnes per year, but estimates for all 'inshore' landing reach 16,000 tonnes.

Kenya has enacted a new Constitution (2010) that reinforces the importance of natural resources and the environment. The constitution provides for the establishment of an environment and land court to address disputes related to environmental and land resources and processes. Kenya's newly devolved system of government calls for collaboration between national and county government administrations. The national government has jurisdiction over the use of international waters and water resources, marine navigation, and the protection of the environment and natural resources including fishing and water. The county governments are responsible for implementing national policies including issues related to fisheries. Legislation relevant to the marine and coastal environment is substantive in the country with nearly 50 pieces of legislation. The framework involves at least 14 government ministries and a further 9 authorities.

The country has a framework environmental law known as the Environmental Management and Coordination Act (1999) (EMCA) that provides the legal and institutional framework for managing and protecting Kenya's environment. The EMCA also establishes the National Environment Council (NEC) and the National Environment Management Authority (NEMA). Section 55 of EMCA 1999 mandates NEMA to carry out a survey of the coastal zone and prepare an Integrated Coastal Zone Management (ICZM) Policy to encourage management and protection of the marine and coastal

environment and its associated river basins and estuaries. There is also the Environmental Impact Assessment and Audit Regulations (2003) that require the inclusion of environmental management plans in all EIA reports. Other legislation that are relevant to coastal and marine environment includes the Physical Planning Act (1996), the Public Health, the Forest Act (2005), the Kenya Maritime Authority Act (2006), the Merchant Shipping Act (2009), the Coast Development Authority Act (1990), the Water Act (2002), the Agriculture Act (1963), the Fertilizers and Animal Foodstuffs (Amendment) Bill (2013), Mining Act (2012), and Science, Technology and Innovation Act (2013). The country also has policies that are relevant to the management of the coastal and marine environment. These include the National Environment Policy (2012), the National Oceans and Fisheries Policy (2008), the Wetland Policy (2009), the National Land Policy (2009), the Regional Development Authorities Policy (2007), among others.

The country has also formulated the National Poverty Reduction Plan (1999–2015), the Poverty Reduction Strategy Paper 2001, and Kenya's Vision 2030, which cites environmental degradation as a root cause of poverty and calls for environmental protection and sustainable development. The country also has an ICZM Policy that brings together all stakeholders involved in the development, management and use of the coastal zone within a framework that facilitates the coordination and integration of activities and decision-making process. The ICZM Policy has been actualised through the formulation of the ICZM Action Plan (2010–2014) that provides concrete measures for protecting coastal and marine ecosystems in the country. Also, the National Biodiversity Strategy and Action Plan (2000) harmonizes the fragmented and multiple laws on environment across different sectors.

Kenya has several institutions that have mandate for coastal environment management. The NEMA exercises general supervision and coordination over all environmental matters including coastal and marine environmental issues. The National Environment Council is charged with policy formulation, setting national goals, objectives and priorities for protecting the environment and fostering stakeholder cooperation. There are also established County/District environment committees. Other institutions are specific to sectors or resources. They include Kenya Forest Service (KFS) for forest management; Kenya Forest Research Institute (KEFRI) for forestry research; Fisheries Department for fisheries management; KMFRI for fishery research; Kenya Maritime Authority for the regulation of maritime services; Kenya Ports Authority for port and harbour management; and Kenya Wildlife Service (KWS) for wildlife management including in Marine Protected Area (MPAs). Others are the Coast Development Authority (CDA) for coastal regional development; the Water Resources Management Authority (WARMA); National Museums of Kenya; public universities for capacity building and research; and various local authorities responsible for Mombasa and other municipalities in the coastal region.

Tanzania

The United Republic of Tanzania has one of the longest coastlines in the WIO region with 1,424 km. The coastline is characterised by a relatively narrow continental shelf covering a surface area of 17,903 km^2. The coral reef and mangrove ecosystems cover a surface area of 3,580 and 1,287 km^2 respectively. The major river systems in the country are the Rufiji and the Ruvuma. The Rufiji delta to the south of the country has one of the largest mangrove forest stands in the WIO Region. It is estimated that about 8 million live in the coastal zone. The coastal and marine environment is important to the country. For instance, marine fish landings range from 45,000 to 59,000 tonnes for mainland Tanzania and 15,000 - 20,000 tonnes for Zanzibar. The coral reefs of Tanzania support 70% of the artisanal catches.

The Constitution of Tanzania does not have explicit provisions on environmental protection and management. However, the country has environmental legislation that is also relevant to the management of the coastal and marine environment. Tanzania's Constitution distinguishes between union and non-union matters. The environment is a non-union matter resulting in separate legislation and administrative authorities governing environmental issues and marine fisheries for mainland Tanzania and Zanzibar. An exception is the Deep Sea Fishing Authority (Amendment) Act (2007),

which is a union matter and is common to both. The Tanzanian administration is also decentralized and district councils have been vested with greater authority.

Tanzania has comprehensive legal and institutional frameworks for coastal and marine environments. The Environmental Management Act (EMA) (2004), which applies to the sustainable management of the environment in mainland Tanzania, overrides other environmental laws. Zanzibar's Environmental Management for Sustainable Development Act (1996) is an equivalent law governing international obligations, stakeholder participation, institutional arrangements, environmental impact assessments and dispute resolution. Other laws are scattered across various sectors. These include the Forest Ordinance Chapter 389 (1957) as amended variously in 1964, 1979 and 1991, and the Tanzania Forestry Research Institute Act (1980). The legislation related to the extraction of natural resources includes the Petroleum (Exploration and Production) Act (1980), the Mining Act (1998), and the Mining (Environmental Management and Protection) Regulations (1999). Key legislation governing fisheries includes the Fisheries Act (2003), the Tanzania Fisheries Research Institute Act (1980), the Marine Parks and Reserves Act (1994), and the Deep Sea Fishing Authority Act (1997). Legislation relating to lands and urban development includes the Land Ordinance (1923), the Town and Country Planning Ordinance (1996) Cap 378, the National Land-use Planning Commission Act (1999), and the Village Lands Act (1999). In the wildlife sector, the National Parks Ordinance (1959) and the Wildlife Conservation Act (1974) are important.

The country has several policies that have relevancy on the environment. These include the National Environment Policy (1997) that provides a framework for introducing environmental considerations into the mainstream of decision-making. Other policies and instruments guiding environmental management are the National Forest Policy (1998), the Forest Action Plan (1990/91 – 2007/08), Management Plan for the Mangrove Ecosystem in Tanzania (1991), the Agricultural and Livestock Policy (1997), National Tourism Policy (1991) (reviewed 1996) and the Integrated Tourism Master Plan (1996–2005). Others are the National Fisheries Sector Policy (1997), the National Land Policy (1995), the Wildlife Policy of Tanzania (1998), the Sustainable Industrial Development Policy (1996) and the ICZM Policy.

The ICZM policy and regulatory instruments include the National Integrated Coastal Environment Management Strategy, the National Steering Committee on Integrated Coastal Management, the Integrated Coastal Management Unit and intersectoral working groups. In Zanzibar, the National Environmental Policy (1992) outlines the conservation and protection of environmental resources and an ICZM plan even though there is no specific ICZM legislation.

National institutions for the mainland Tanzania and for Zanzibar have been vested with environmental oversight authority by various pieces of legislation. The Division of Environment in the Office of the Vice President is responsible for research,[29] policy, planning, monitoring and coordinating broad-based environmental programmes and projects. The National Environmental Advisory Committee advises the Minister of State for the Environment. The National Environment Management Council (NEMC) serves as an advisory think tank to the government and conducts a number of activities aligned to the UN's Agenda 21.

The Tanzania Forest Services (TFS) under the Ministry of Natural Resources and Tourism is responsible for developing, reviewing and overseeing the implementation of forest policy, laws and regulations. The TFS mandate extends to coastal forests, including the restoration of degraded mangrove forests. The Marine Parks and Reserves Authority (MPRA) was constituted under the Marine Parks and Reserves Act (1994). Its' board of trustees oversees its administration to safeguard marine resources through sustainable use. MPRA recognizes the significance of coastal habitats, including mangroves as fish nurseries, bird habitats and barriers against flooding. One of its tenets is

[29]Includes publishing the National State of Environment Report every four years

the importance of creating resilience in threatened habitats by helping local communities to manage their natural resources. MPRA works with TFS mangrove forest officers.

Several institutions in Zanzibar have been constituted under the EMA. The Special Committee of the Revolutionary Council on the Environment, headed by the Chief Minister, oversees environmental matters. The Department of Environment is the administrative arm and coordinates policy with the EIA–Natural Resource Management section within the Ministry, which mobilizes community participation in mangrove restoration. A Steering Committee on integrated coastal management is supported by district committees and community groups.

Mozambique

Mozambique's coastline is the longest in eastern Africa, extending 2,700 km. The area covered by the continental shelf is 73,300 km^2.The coral reef, mangroves and seagrass ecosystems cover surface area of 1,860 km^2, 2,909 km^2 and 439 km^2, respectively. The northern coastline is notably complex with many islands and bays. Mozambique's southern coast is characterised by the Limpopo and Zambezi deltas-two of the eastern Africa's largest deltaic systems. These are characterised by the presence of large bays, muddy and sandy beaches, extensive mangrove forests and seagrass beds. Approximately 59% of the population lives within 100km of the coast. The total marine fishery production is estimated to range between 100,000 to 120,000 tonnes per year.

The Constitution of Mozambique recognises the right of people to live in a balanced environment and provides state and local authorities with the responsibility of protecting the environment. The country has a number of legal instruments that are focused on environmental protection. These include Decree Law no. 495 (1973) on the coastal and marine environment, and the Environment Law (1997) that defines the legal basis for sustainable management of the environment by the public and private sectors. The Law of the Sea (1996) sanctions conservation of marine areas by creating marine national parks, marine nature reserves and marine protected areas. This law is consistent with the International Convention on the Law of the Sea (1982), which Mozambique has ratified.

The National Environmental Policy is the principal policy instrument for the environment sector in Mozambique. It calls on the state to provide incentives for the sustainable use of natural resources and integrates environmental issues into economic planning. It also defines the framework under which the Ministry for Coordination of Environmental Affairs (MICOA) works. The country also has Strategic Plan on the Environment (2005–2015).Other policy instruments relevant to environmental management are the National Action Plan to Combat Desertification and Drought; the National Forests and Wildlife Policy and Strategy; the National Tourism Policy and Strategy; the National Fisheries Policy; the National Land Policy; the Agrarian Policy; the National Water Policy; and the Strategy and Action Plan for Biodiversity Conservation. Other equally important policy instruments are the Energy Policy and Strategy (1998); the National Environmental Policy (1995); the Policy for Disaster Management (1999); the National Policy for Land Use Planning (1996); the National Action Programme for Adaption to Climate Change; the Policy (1996) and Strategy (2006) for Meteorology Development; and the Conservation Policy and Implementation Strategy (2009).

The main institutional arrangements in Mozambique includes the Ministry of Coordination of Environmental Affairs (MICOA); National Directorate of Environmental Management; National Directorate of Environmental Impact Assessment; National Directorate of Territorial Planning; Centre for Sustainable Development of Coastal Zones; Centre for Sustainable Development of Urban Zones; Centre for Sustainable Development of Natural Resources; and the National Institute of Hydrography and Navigation.MICOA oversees national environment policy formulation and implementation. Other institutions established under MICOA include the National Directorate for Environmental Management, the National Directorate for Territorial Planning and the Sustainable Development Centre. MICOA works jointly with other sectors (maritime administration, fisheries, mining, agriculture and forests) and the ministry of Fisheries, Ministry of Tourism - National Administration of Conservation Areas, Ministry of Public Works and Housing - National Directorate

of Water and Regional Administration of Water, Ministry of Mineral Resources and Ministry of State Affairs - National Institute for Disaster Management.

South Africa

The South Africa's coastline is 2,881 km long and the continental shelf covers a surface area of 160,938 km^2 making it one of the largest in the WIO Region. The area covered by the coral reef, mangrove and seagrass ecosystems is however small covering 50, 31 km^2 and 7 km^2, respectively. About 39% of the South African population live within 100 km of the coast. Indian Ocean fisheries in South Africa are relatively minor compared to the industrial fisheries found on the Atlantic coast. Nevertheless, numerous subsistence fisheries exist off the Natal coast of the Indian Ocean.

South Africa Constitution has the Bill of Rights that includes an environmental right. Also, a number of legislation on the environment have been enacted. The new Constitution of South Africa allows for more inclusive and comprehensive environmental policy for the country. The country has formulated through the consultative national environmental policy process, the White Paper on Environmental Management Policy for South Africa. This in turn led to the enactment of the National Environmental Management Act No 107 of 1998 (NEMA). The White Paper emphasizes the notion of "sustainable development" and specifically endorses the definition and analysis offered by the 1987 Brundtland Report.

A separate policy process was initiated in 1997 with respect to the coastal area and this was first underpinned by a discussion document titled *Our Coast Our Future: Coastal Policy Green Paper: Towards Sustainable Coastal Development in South Africa Department of Environmental Affairs and Tourism September 1998 (the "Green Paper").* The Coastal Policy White Paper led to the preparation of Coastal Zone Management Act.

South Africa currently has two framework acts, namely the Environment Conservation Act 73 of 1989 (ECA) and the National Environmental Management Act 107 of 1998 (NEMA). The National Environmental Management Act (107 of 1998) is the framework environmental law concerned primarily with co-operative environmental governance. The Act lays down a set of national environmental management principles in which all government agencies have to take cognizance of. Other relevant legislation include the Sea-shore Act 21 of 1935, Disaster Management Act 57 of 2002 and Maritime Zones Act 15 of 1994, National Water Act 36 of 1998, Water Services Act 108 of 1997, Dumping at Sea Control Act 73 of 1980,National Building Regulations and Building Standards Act 103 of 1977, National Environmental Management: Biodiversity Act 10 of 2004,National Environmental Management: Protected Areas Act 57 of 2003,Marine Living Resources Act, 18 of 1998 (MLRA), Health Act 63 of 1977, Foodstuffs, Cosmetics and Disinfectants Act 54 of 1972,Minerals and Petroleum Resources Development Act 28 of 2002 (MPRDA), Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act 36 of 1947, Agricultural Pests Act 36 of 1983,Hazardous Substances Act 15 of 1973,Marine Living Resources Act 18 of 1998,Draft Coastal Area Management Bill and several provincial ordinances and regulations.

South Africa has national and regional institutions that are considered important for environmental management. These include the Department of Environmental Affairs and Tourism (the DEAT) that administers the Sea-shore Act 21 of 1935, the Environment Conservation Act 73 of 1989, as well as the National Environmental Management Act 108 of 1998; the Department of Transport is responsible for transportation generally including navigation is not directly involved with LBS of marine pollution but has traditionally administered the Marine Traffic Act, the Merchant Shipping Act, the Marine Pollution (Control and Liability) Act and the Marine Pollution (Prevention of Pollution from Ships) Act described above. The privatization process resulted also in the creation of a statutory authority, the South African Maritime Safety Authority (SAMSA), to which in 1998 many of the marine pollution functions were transferred to. SAMSA now deals with maritime navigation, including the maintenance of standards by vessels.

National Ports Authority (NPA) and South African Port Operations (SAPO) manages and controls South Africa's eight commercial seaports (Richards Bay, Durban, East London, Ngqura, Port Elizabeth, Mossel Bay, Cape Town and Saldanha and is responsible for all aspects of the management and control, including the maintenance and development of port infrastructure Department of Water Affairs and Forestry (the DWAF) administers the National Water Act 36 of 1998 and Water Services Act. The Directorate Water Quality is responsible for water quality management including the pollution of the marine environment from land-based sources, both point sources (for example, effluent pipelines out to sea) and non-point sources (for example, seepage).

Comoros

The Islamic Republic of the Comoros has a total coastline of 340 km and the total surface area of the continental shelf is 1,416 km^2. The marine fisheries are essentially artisanal, practiced on all three islands. Comoros also has framework legislation, institutions and several other laws that are relevant to the management of the coastal and marine environment. The framework environmental law is "Loi No. 94-018 du 23 juin1994" that aims at preserving the integrity of the coastal and marine environment. Some of the other relevant legislation include law no.82-005 which defines Comoros' maritime zones. The national policy and the Environmental Action Plan were formulated in 1993 to promote sustainable management. The Environment Action Plan is focussed on the improvement of legislative and regulatory mechanisms, protection of biodiversity, alleviation of pressure on natural resources and collection and treatment of wastes.

There are several important national and regional policies and action plans under the national environment programme. These include a National Policy on the Environment ("La Politique National de l'Environnement") and a National Action for the Environment ("Plan d'Action Environnementale, PAE"). The primary national environmental institution is the Directorate of the Environment ("La Direction Générale de l'Environnement"). The Directorate is responsible for the management and implementation of the PNE and the PAE. The coordination of multi-sectoral environmental actions is undertaken by an inter-ministerial consultative committee on the environment ("Comité Interministérielle Consultatif pour l'Environnement").

The Directorate of the Environment is under the Ministry of Production and Environment ("Ministère de la Production et de l'Environnement"). Other relevant institutions under the Ministry include "Le Service de la Règlementation et du Contrôle", which is focussed on the formulation and implementation of environmental legislation, the National Institute for Research in Agriculture, Fisheries and Environment ("INRAPE") and "Le Centre National de Documentation et de Recherche Scientifique (CNDRS)" whose mandate is research and development of programmes on fauna and flora and socio- cultural aspects of the environment, public education and sensitisation on diverse themes on the environment.

Madagascar

Madagascar has one of the longest coastline in the WIO Region which is 4,828 km long and also one of the largest extent of the continental shelf covering a total surface area of 96,653 km^2. The mangroves, seagrass beds and coral reef ecosystems cover a surface area of 2,991 km^2 and 2,230 km^2, respectively. About 55% of the population lives within 100 km from the coast. The most recent estimate of the marine fish catch is 70,000 tonnes per year. The deep-water, offshore, industrial fishery lands about 25,000 tonnes a year, mainly of tuna, mostly for export. The shrimp fishery is also an important foreign exchange earner in Madagascar with over 11,500 tonnes per year.

Madagascar has a framework environmental legislation (LOI No. 90-033- Relative à la Charte de l' Environnement Malagasy of December 21 1990) which notes that the environment is an important pre-occupation of the State and its protection is the responsibility for all. Several specific legislations have also been enactment to give effect to the constitutional requirement for protecting the environment. The country also has several environmental management policies particularly the Charter of the Environment and the Decree MECIE. Both constitute the basis of the legislation

regarding protection and conservation of the environment of Madagascar.Madagascar has a policy on the management of marine/water pollution. There have also been specific presidential declarations on the establishment of protected areas in the country. The key institutions that are crucial in environmental management in the country include the Office of the Environment (ONE).

Mauritius

Mauritius coastline is 322 km long with the continental shelf of 27,373 km^2.The annual fisheries production in the country is estimated to be about 10,000 tonnes. The country has several legislation that are important in the protection of the coastal and marine environment. The Environmental Protection Act (EPA) was enacted in 2002 for the environmental management and coordination of environmental issues in order to ensure proper implementation of government policies.

Existing legislations relating to land based pollution in Mauritius include the following: The Waste Water Management Authority Act 2000, Marine and Fisheries Act, Rivers and Canals Act 1895, Ground Water Act 1982, Ground Water regulation 1973, Pesticides Control (Restricted Pesticides) Regulations 1982, Local Government (Public Beaches) Regulations 1992, Local Government (Dumping and Waste Carriers) Regulation 1997, Environment Protection (Effluent Discharge Permit) Regulations 2003, Environment Protection (Standards for hazardous Wastes) Regulations 2001, Environment Protection (standards of Effluent for use in irrigation) Regulations 2003, Environment Protection (Standards for Effluent discharge into the Ocean) Regulations 2003, Environment Protection (Effluent Discharge Permit) Regulations 2003, Guidelines for inland surface water Quality, Guidelines for Coastal Water Quality and Guidelines for Irrigation Water Quality.

The country has also formulated the National Environmental Action Plan (NEAP) that identified inadequate disposal of urban waste water as a growing threat to the quality of ground water- the principal source of domestic water supply of the country, as well as to marine and coastal zone ecosystems. As a follow up of the NEAP recommendations, the Government launched the Sewerage Master Plan (SMP) Study. The plan that was completed in 1994, identified the technical, institutional, legislative and financial constraints. The National Sewerage Programme (NSP) composing priority projects to be implemented over a decade was prepared.

The Ministry of Environment and National Development Unit (MOE) is the principal institution and has the overall responsibility for the protection of the environment. The Ministry may by way of regulations provide for the management and protection of the environment. It is also empowered to prepare an integrated coastal zone management plan.

The Ministry of Agro-Industry and Fisheries is charged with the responsibility of ensuring the sustainable development and management of fisheries resources, conservation and protection of living aquatic resources and the marine environment in the waters of and of interest to Mauritius and continued socio-economic benefits to stakeholders. The Mauritius Ports Authority (MPA) established under the Ports Act 1998 has a duty of safeguarding the protection of the environment and preventing any type of the pollution within the Port area. The Waste Water Management Authority (WMA) established under the Waste Water Management Authority Act 2000 is responsible for management of wastewater in the island.

Seychelles

Seychelles has a coastline of 491km^2 and continental shelf of 31,479 km^2. Almost 100 % of the entire population of Seychelles live within 100 km of the coast. The fishery sector, after tourism, is the major foreign exchange earner. The total catch from the artisanal sector has remained fairly stable since 1985 with landings typically ranging between 4,000 and 5,000 tonnes per year. Seychelles Constitution under Article 38 guarantees citizen clean, healthy and ecologically balanced environment. The Environment Protection Act 1994 is the framework environmental legislation for the country, providing for the protection, preservation and improvement of the environment. The Act also provides for the coordination, implementation and enforcement of environmental policies. The Environment Protection Act is administered by the Department of Environment in the Ministry of

Environment and Natural Resources. Part IV of the EPA and the Environment Protection (Impact Assessment) Regulations (EP) (EIA) Regulations) deals with Environment Impact Assessment (EIA).

The country has a number of other legislations that are important in the management and conservation of the coastal and marine environment. These include the Town and Country Planning Act, 1972, the Removal of Sand and Gravel Act, 1982, the Public Utilities Corporation Act, 1985, the Pesticides Control Act, 1996 promotes the safe usage of pesticides, Land Reclamation Act that lays down the procedure to follow for a private or public reclamation of land by filling any foreshore.

The main policy relating to the protection of the environment in the Seychelles is the Environmental Management Plan of Seychelles (EMPS). The EMPS seeks to integrate environmental issues into all development sectors. The National Biodiversity Strategy and Action Plan (NBSAP) prepared in 1997 identifies the country's vision for biodiversity conservation. Issues that are common to both the NBSAP and the EMPS include sustainable management of marine resources as well as capacity building for assessment, monitoring and forecasting.

The Seychelles Plan d'Aménagement du Territoire or National Land Use Plan, finalised in 1993, is the primary guide to land use decision making by the Town and Country Planning Authority. The National Agricultural Policy aims at achieving higher food security through sustainable agricultural production. The other major policy document is the Solid Waste Master Plan which includes incineration, storage, and disposal of hazardous and medical waste.

The Ministry of Environment and Natural Resources is the principal environmental protection institution in Seychelles. The Ministry has several agencies namely the Marine Parks Authority, the Solid Waste and Cleaning Agency, the Seychelles Fishing Authority, the Island Development Corporation as well as the Water and Sewerage Division of the Public Utilities Corporation. The Seychelles Bureau of Standards is responsible for the setting of standards and testing of certain chemicals and oils, among others. Others important institutions are the Ministry of Health (Environmental Health Section) and the Pesticides Board.

In conclusion, the national-level policy, sectoral and institutional framework for implementation of the WIOSAP project is strong, with a wealth of foundational experience that readily lent to new catalytic and mainstreaming activities built upon through GEF incremental investments for effective project implementation.

2.5 Stakeholder Mapping and Analysis

The main stakeholders to the WIO-SAP Project will be the governments of the WIO countries and their relevant local and national institutions (see Tables 5, 11 and Appendix 24). The regional intergovernmental and non-governmental organisations, and local community organisations that have specific responsibilities and functions are also considered to be important stakeholders in the project. The project being a partnership initiative represents a collaborative effort among the participating countries and mandated regional bodies to implement joint activities in the region. The project will adopt a participatory approach in the implementation of various project activities and will pay particular attention to gender mainstreaming including gender awareness, access to resources and empowerment. The implementation of the project will therefore involve participation of a wide range of partners who are already active in the WIO region addressing many relevant and complimentary environmental issues related to the protection, management and development of the coastal and marine environment.

The project will also promote various partnerships established within the auspices of the Nairobi Convention, more so with the governments, civil society, private sector and regional and international organisations who are addressing marine and coastal issues in the WIO region. Stakeholders will take responsibility for specific activities and deliverables of the project on the basis of their experience,

roles and functions as being national or regional bodies with formal responsibilities that are relevant to the projects' specific thematic areas. WIO-SAP Project would work closely with such bodies to ensure that funding and expertise to support such agreed activities is made available as may be appropriate.

Governmental Organisations/agencies

Governmental institutions and agencies in participating countries undertake a wide range of actions in the protection and conservation of coastal and marine ecosystems. Responsibilities for biodiversity, protected areas, fisheries, coastal zone management and other relevant sectors such as tourism are often divided across several Ministries and levels of administration (national, district, municipal, etc.). In some countries, there is an over-arching government agency or department under the environment ministry that is responsible for coastal and marine issues. Examples include National Directorate for Environmental Management (NDEM) under the Ministry of Coordination of Environmental Affairs (MICOA) in Mozambique, National Environment Management Authority (NEMA) under the Ministry of Environment, Water and Natural Resources in Kenya, among others.

Other key government stakeholders identified in participating countries include departments, institutions and agencies under Ministries of Fisheries, Tourism, Agriculture and Conservation. Other relevant agencies and levels of administration include various Counties, Municipalities and District Administrations, Tourism Associations/ Forums and the Marine Park Authorities. Some countries have a decentralized approach to government and have established marine management platforms to ensure stakeholder coordination at different levels (national, regional and local).

Government stakeholders are responsible for a wide variety of mandates that will affect project activities, including the development and enforcement of legislation and regulations for the conservation of coastal and marine habitats and the management of marine protected areas. Government and local governments are also involved in establishment/approval and oversight of community or co-managed protected areas (e.g. LMMAs in Madagascar). They will thus provide a degree of horizontal coordination for the project at the national level, required for cross-sectoral activities (e.g. development of Integrated Coastal Zone Management plans, awareness raising materials, etc.). Government agencies and staff (e.g. National Focal Points) are responsible for reporting under international conventions and agreements such as the CBD and for collaboration on regional initiatives with other national governments.

International and Regional Organisations

The governments of the WIO region are parties to a number of agreements, conventions and protocols that are considered relevant to the WIOSAP project implementation. The most relevant regional intergovernmental organisations include the Nairobi Convention, the South West Indian Ocean Fisheries Commission (SWIOFC), the Indian Ocean Tuna Commission (IOTC), the Southern Indian Ocean Fisheries Agreement (SIOFA) and the Indian Ocean Commission (IOC). In addition, the governments in the region also participate in the activities of a number of other regional bodies such as the Intergovernmental Oceanographic Commission (IOC of UNESCO).

There are also a number of important river basin organisations that the project would collaborate with in the implementation of the project, particularly for activities aimed at building the capacity for environmental flow assessment. These include the Tana and Athi Rivers Development Authority (TARDA) in Kenya, Rufiji Basin Development Authority (RUBADA) in Tanzania, Zambezi Basin Authority, Incomati Technical Committee, Limpopo Commission, among others.

Civil Society Organisations

Civil society organisations (CSOs) are the non-governmental entities involved in protection and conservation of the coastal and marine habitats , including national and international NGOs and local community organizations, youth, women's and other community groups. CSOs often have particular strengths in advocacy, education and awareness and local community involvement in natural resource management/stewardship and community co-management of protected areas or individual species or

habitats conservation action. CSO roles in the project will vary according to the country and different site-specific community initiatives but will involve all aspects of project implementation at local, national and regional levels. Larger international NGOs such as WWF and IUCN will play roles in project management; other smaller CSOs will play more local site-based roles, as appropriate.

A large number of NGOs focused on the coastal and marine environment issues are active in the WIO region. A number are engaged in activities that are relevant to the SAP. The Western Indian Ocean Consortium of NGOs (WIO-C) established during the implementation of the WIO-LaB Project will be engaged in the implementation of specific project activities that are relevant to their mandate. The members of WIO-C include WWF, IUCN, WCS, CORDIO, Birdlife International, WIOMSA, among others. The NGOs will, in particular, be involved in the implementation of in-country interventions among other capacity building activities. The project management will involve the National Focal Points for the project in the identification of the most appropriate NGOs to be engaged in the implementation of project activities at national level.

The coastal communities in the region and various coastal and marine natural resource users and resource managers will be the main beneficiaries of the project intervention. The governments in the WIO Region and other contracting parties to the Nairobi Convention will also benefit from strengthened legal and regulatory frameworks, including provision of support to the demonstration of new approaches of managing the use of coastal and marine ecosystems. The project will address poverty and equity through on the ground interventions at the local community level to enhance the benefits of sustained and/or improved ecosystem goods and services accruing from sustainable management of coastal and marine resources.

Local communities, NGOs, private sector, technical institutions and ministries will be involved in the development and implementation of in-country interventions on wastewater management, development of water quality standards, including guidelines for best practices in the use of coastal and marine resources, among others. Local communities and CSOs are expected to also contribute to the design and implementation of the in-country interventions including various critical ecosystem restoration activities that will be undertaken.

Natural resource managers in the WIO region working within the framework of the Inter-Ministerial Coordination Committees would help coordinate some of the project activities at the national level, support national and regional decision-making and monitor project progress and facilitate data-sharing at national and regional levels. The development of tools and implementation of on-the-ground-activities will not only support capacity development of resource managers and their institutions but will also benefit resource users.

Research Organisation Stakeholders

Research institutions and universities in the WIO Region will play key roles in the implementation activities related to economic valuation, environmental flow assessments, hotspot sites monitoring using agreed indicators, and the assessment of vulnerability of ecosystems to climate change. These institutions will principally be expected to participate in activities that are aimed at generating new data and information that will inform decision-making processes. The generation of data and information will also assist in coastal spatial planning in target countries. Knowledge gaps and lack of data are major barriers to the improvement of the protection and conservation of the coastal and marine ecosystems in the WIO Region, identified in all participating countries. Research and monitoring will be supported by the PADH Task Force that consists of a network of experts with different skills for the conservation and management of coastal and marine habitats. Members of the PADH task Force are drawn from a wide variety of supporting national research institutions and universities.

In the region, scientific research on coastal and marine habitats involve government agencies (e.g. the Centre National de Recherches Océanographiques (CNRO) and the Centre National de Recherches sur l'Environnement (CNRE) in Madagascar, Kenya Marine and Fisheries Research Institute

(KMFRI), Tanzania Fisheries Research Institute (TAFIRI), CSIRO in South Africa, among others.); regional and international NGOs (WCS, WIOMSA, CORDIO, etc.) and large research programmes mainly by experts from outside the region.

United Nations and Multi-lateral organizations, MEAs and agencies

Multi-lateral and bilateral donors and organizations including UNEP, FAO and UNDP and relevant international and regional MEAs, will be involved in the implementation of the project activities, depending on their mandate and on-going projects in the WIO region. The project will also support the engagement of other partners that are broadly concerned with conservation of the region's natural resources such as the Indian Ocean Commission (IOC), the South Western Indian Ocean Commission (SWIOC), the East Africa Community (EAC), the Southern African Development Community (SADC), the African Union (AU), among others.

The project will also involve other stakeholders on the basis of their experience in the WIO region including the relevancy of their focal areas of intervention, for example the Indian Ocean Commission (IOC/COI), and UNEP-GPA.

Other stakeholders

Private sector involvement in the project will be largely at the level of individual site based initiatives where stakeholders include developers, hotel owners, etc. The private sector in the WIO region is crucial in the sustainable management of the coastal and marine environment, particularly in view of the fact that many LBSA issues originate from activities that are associated with the private sector, for instance, manufacturing industries which are some of the main sources of wastewater and effluents in the region. In this regard, significant effort will be made to involve the private sector in the implementation of specific aspects of the project related to the demonstration of wastewater management technologies and development of water quality standards for receiving marine waters. A key stakeholder in these efforts will be the local government authorities who are responsible for most of the public wastewater treatment plants in urban centres in the region.

The Table 5 below provides an outline of the general and specific roles and responsibilities that the various stakeholders would be expected to play during the implementation of the project. The table presents the consolidated grouping of stakeholders in relevant sectoral areas without necessarily providing details on the specific stakeholders to be involved. The details on the specific stakeholders to be engaged in the implementation of the project is presented in Appendix 24. The names of the

specific institutions will be compiled during the early stages of implementation of the project when a detailed work plan would also be compiled by the project management unit.

Table 5: Consolidated list of stakeholders in various sectoral areas

Stakeholder	Role	Possible areas of involvement in SAP implementation
Country (Government) Stakeholders		
Fisheries including Aquaculture Ministries	Coordination and management of the coastal and marine fisheries and aquaculture activities	Compilation and sharing of experiences and lessons learnt on the exploitation/utilisation of coastal natural resources Development and use of Guidelines on Sustainable Fisheries and Aquaculture Management
Agriculture and Forestry Ministries	Coordination and management of agriculture and forestry activities in the coastal areas of the WIO region	Development of Coastal Ecosystems Management Plans Development of Guidelines for restoration of critical habitats including engagement of communities in the formulation of Management Plans Engagement of local Communities in habitat restoration projects

Urbanisation and Coastal Development	Coordination, regulation and management of urban development including coastal development and planning	Development of Coastal Zone Spatial Plans Building capacity for development and implementation of ICZM Plans Selection of municipal wastewater /effluent treatment technologies Implementation of in-country interventions on wastewater management
Environment and Water Ministries	Coordination, regulation and management of the coastal and marine environment/ critical ecosystems including also the river basins and associated freshwater resources.	Development of national water quality standards including harmonisation of regional water quality standards Development of sustainable national water quality monitoring programmes Sharing of experiences/lessons learnt on the use of coastal natural resources/habitats Development of regional Indicators of the State of the Coastal ecosystems/habitats Identification and selection of municipal wastewater treatment technologies including participation in in-country interventions on wastewater management Development of Coastal Ecosystem and or habitats Management Plans Development of strategies for development of ICZM Plans Participation in Training Workshops on the application/enforcement of water quality standards including mechanisms for sustainable financing of water quality monitoring programmes. Capacity buiding on Environmental Flow Assessments (EFAs) Policy development
Mining Ministry	Coordination and regulation of the mining sector	Development of alternative livelihood systems among the local communities Development and implementation of guidelines for wastewater management. Implementation of EFA recommendations/guidelines.
Energy Ministries	Coordination and regulation of the energy sector	Participate in Environmental Flow Assessments (EFAs)
Foreign Affairs Ministries	Coordination and management of international government processes and relations	Negotiations of ICZM Protocol. Ratification of LBSA Protocol
Industrial Development Ministries	Coordination, regulation and management of the industrial development.	Identification and selection of municipal wastewater/effluent treatment technologies Implementation of in-country interventions on wastewater/effluent management

Finance and Economic Planning Ministries	Provide and coordinate adequate financial resources to relevant government departments and ministries to ensure sustainability of SAP activities	Development and application of Economic Valuation methodologies for critical habitats. Participation in capacity building for Economic Valuation of coastal and marine ecosystems Development of mechanisms for financing restoration and national assessment programmes focussed on coastal ecosystems/habitats Participation in Training Workshops on the application/enforcement of water quality standards including mechanisms for sustainable financing of water quality monitoring programmes.
Tourism Ministries	Oversee and regulate tourism activities	Implementation of wastewater/effluent treatment in-country interventions Development and implementation of water quality standards Restoration of critical coastal habitats such as mangroves, seagrasses, coral reefs. Development of alternative livelihood systems for coastal communities
Regional and local governance structures (governors, mayors, local councils)	Oversee and regulate and co-finance activities at regional /county/provincial level	Spatial planning, enforcement of regulations In-country interventions Local initiatives and co-financing Local awareness raising
Interministerial Committees/intersectoral working groups	Provide policy oversight and guidance on intersectoral issues	Oversee the implementation of various project activities at national level
International & Regional Stakeholders		
Donors	Provide additional funding for implementing SAP activities at national and regional levels	Provide support to the implementation of activities at national and regional levels. Ensure adequate financial and procedural oversight of project activities Facilitate regional and international dialogue and networking
IGOs	Provide additional funding and technical support for implementation of SAP activities	Provide support to countries activities to ratify/accede to relevant protocols Support country "domestication" of conventions and protocols.
NGOs	Collaboration in the implementation of SAP activities	Work with relevant stakeholders to implement and sustain project activities. Create and sustain partnerships with other stakeholders to sustain activities initiated by SAP Project
CBOs	Collaboration and support in implementation of SAP in complementary project activities	Work with relevant stakeholders to sustain activities initiated by the project Create and sustain partnerships with other stakeholders to sustain activities initiated by SAP Project
Projects	Joint implementation of complementary activities	Implement complimentary activities to promote project efficiency and effectiveness and avoid duplication of effort.
Research Organisation Stakeholders		
Research Associations	Coordinate and support regional research activities	Monitor EQOs and other Indicators Building of capacity for coastal monitoring Provision of technical support in the development of guidelines/monitoring tools

Coastal and marine Research Institutions	Conduct research and disseminate research outputs	Conduct multidisciplinary marine and coastal research Implementation of coastal marine monitoring programmes Translation of scientific information into policy & management advice Development of national and regional guidelines for water quality management
Private Sector Stakeholders		
Private Sector Industry Bodies & Associations	Lobby and coordinate activities of sector-based organisations	Coordinate industry participation in SAP Implementation activities by sub-sector (according to their membership) Ensure members uphold relevant national and regional agreements, regulations, conventions and protocols
Tourism Companies	Provide services to global, regional and national touristic markets	Provision of support to pilot in-country interventions on wastewater management, restoration of critical habitats including development of alternative livelihood systems
Construction/Civil Engineering Companies	Construct and maintain infrastructure with due regard to environmental impacts	Dissemination of information on the design and construction of wastewater/effluent treatment plants, including adoption of appropriate technologies
Financial Services Companies	Provide facilities for society to access sustainable financial resources	Provide support to communities in the development of alternative livelihood systems including funding for restoration of critical habitats and construction of wastewater treatment plants.
Local Coastal Communities/Public Stakeholders		
Coastal Communities	Utilisation of coastal and marine natural resources	Participate in relevant ICZM and Marine Spatial Planning processes Consider impacts of activities on marine and coastal ecosystems goods and services Development of alternative livelihood systems including restoration of critical habitats.
Artisanal and Subsistence Fishers	Utilisation of coastal and marine natural resources	Development and implementation of fishing and aquaculture best practice guidelines. Development of alternative livelihood systems including restoration of critical habitats.
Coastal Resource Users (non-fisheries)	Utilisation of coastal and marine natural resources	Development and implementation of fishing and aquaculture best practice guidelines. Development of alternative livelihood systems including restoration of critical habitats.
General public	Utilisation of coastal and marine natural resources	Ensure personal activities are conducted with due regard paid to social and environmental impacts

2.6 Baseline Analysis and Gaps

The basis for the baseline and gap analysis for the WIOSAP Project was laid during the SAP formulation process and also during the PPG stage. These analyses showed that most countries have some existing and at least partially successful interventions for the conservation of the critical coastal and marine habitats. Lack of information is a key issue in all countries and all countries demonstrated the need for better information on the key threats to coastal and marine habitats including their distribution and status. The project will address this need through ecosystem vulnerability surveys in relevant areas, the establishment of monitoring programmes and a Clearing House Mechanism for dissemination and information exchange. The Clearing House Mechanism will be building on the existing Nairobi Convention Clearing House Mechanism processes and structures established during the implementation of the WIO-LaB Project. The reinvigorated Nairobi Convention Clearing House Mechanism will be linked to the national nodes in each of the participating countries in order to also facilitate sharing of data in addition to its information dissemination and exchange functions. The Clearing House Mechanism will also play a complimentary role in the establishment and implementation of water quality and coastal ecosystems monitoring programmes through provision of data and information archival and exchange services, including exchange of lessons, tools and

information on good practices, at both national and regional levels. Further, CHM will play a central role in production of the state of the coast reports from monitoring of ecosystems and water quality and the provision of information, knowledge, and "evidence" of the highest quality and suited to use by decision-makers at regional and national levels as appropriate.

Most of the initiatives in the WIO Region with regard to coastal and marine environment have focused mainly on the basic research intended to generate baseline data and information on the coastal and marine ecosystems. Numerous such studies have been undertaken under the auspices of WIOMSA through its competitive research grant programmes, the Marine Science for Management (MASMA) and Marine Research Grant (MARG) programmes. Others include studies undertaken within the framework of WWF and IUCN. Through work of CORDIO and WCS, studies on the critical ecosystems such as the coral reef and the importance of protected areas in biodiversity conservation have also been undertaken in the region in the region.

Although the participating countries have established marine protected areas in accordance with relevant international targets, the level of protection of critical coastal and marine habitats from land-based sources and activities has been limited. There have been few interventions in the area of municipal wastewater management, pollution control, restoration of coastal ecosystems, among others. There is also a widespread lack of institutional capacity for economic valuation, ecosystem vulnerability assessment, environmental flow assessment, ecosystem restoration, wastewater management, hotspot site monitoring, biodiversity conservation, law enforcement, integrated coastal zone management, community participation in participating countries. Other weaknesses include lack of science-policy linkages and ecosystem based management. These are issues that will be addressed under the WIOSAP Project.

An identified gap in the WIO region is the lack of coordinated and wide-ranging approaches for the conservation of the critical coastal and marine habitats including the management of river flows to the coast. This project will be one of the first to attempt to integrate river basins activities with coastal planning activities. Although most countries in the region are at different stages of adopting and implementing ecosystem based management approaches such as IWRM approaches, the implementation in transboundary river basins has often lagged behind due to lack of capacity; lack of effective transboundary river basin management frameworks; and the lack of appropriate decision-making tools for managing the competing water demands in river basins, as identified in the TDA.

The WIO-LaB TDA described the underlying root causes and drivers of degradation of the coastal and marine environment. The WIO-LaB SAP and LBSA Protocol were the key outcomes of the WIO-LaB project based on extended analytical and stakeholder consensus processes undertaken in participating countries as well as at regional level. The LBSA protocol is a legal instrument, adopted by the participating countries in 2010 while the WIO-LaB SAP identified the priority actions required to enable the contracting parties to the Nairobi Convention to respond to the root causes of the degradation of the coastal and marine ecosystems including fulfilment of their obligations under the LBSA Protocol. The SAP was formally endorsed by the participating countries in 2010 in a Conference of Plenipotentiaries that also adopted the LBSA Protocol. The WIO-LaB SAP together with the LBSA Protocol therefore provides the framework for WIO-SAP project, which is designed to support the contracting Parties in the implementation of the WIO-LaB SAP drawing on the success of the WIO-LaB project.

Numerous national and regional analyses have reached common conclusions on the approaches for addressing the major threats on the coastal and marine environment in the WIO region. Other numerous studies includes the joint LME TDA undertaken under the auspices of the UNDP ASCLME Project and World Bank SWIOFP project that subsequently came up with a joint LME SAP elaborating on the main threats inshore and the offshore resources of in the WIO Region and the priority actions for addressing them. The WIOLAB TDA also analysed the main threats to the sustainable development of the coastal and marine environment focusing mainly on the LBSA in the region. They have also been other numerous studies including thematic and sectoral analyses (e.g.

fisheries, wastewater, tourism, marine transport biodiversity, protected areas, climate change adaptation, extractive industries and port EIAs, and others), undertaken by various other projects and institutions. The cross-cutting issues which are also gaps that the project is focusing on have also been identified such as weak human and institutional capacity, financial constraints, overlapping jurisdiction of public entities and weak policy coherence. These are often exacerbated by inadequate scientific basis for decision-making, in particular with respect to the social and economic impacts at the level of communities and policy makers.

The WIO-LaB SAP was formally endorsed by the Contracting Parties to the Nairobi Convention in April 2010. The SAP was endorsed by June 2010 and the decisions made by the Parties were integrated into the Nairobi Convention's action plan through the LBSA protocol including also the Eastern Africa Action Plan as well as the Work Programme of the Convention. There has therefore been a significant goodwill among the countries in the WIO region including also various other partners of Nairobi Convention such as the establishment of WIO-C Consortium to proceed with the implementation of the SAP, even in advance of additional GEF financing.

The Eastern Africa Action Plan of the Nairobi Convention, along with its work programmes are an important baseline for the WIO-SAP project implementation. The Nairobi Convention work programme prioritized four thematic areas of intervention, namely: (i) assessment; (ii) management of coastal and marine ecosystems; (iii) coordination and legal matters; and (iv) cross-cutting and emerging issues. The Nairobi Convention Trust fund will be financing some of the activities in WIO-SAP component D. These baseline contributions will be complemented by similar baseline project supports from UNEP to WIO-SAP components A, B (GPA), C (Freshwater unit) and D, respectively.

At the national level, an important priority of the project will be to mainstream the priorities of the WIO-SAP into national policy and legal frameworks, policies and strategies. In this regard, most countries already have national ICZM committees that have developed and/or are overseeing the implementation of Integrated Coastal Zone Management (ICZM) Plans, National Plans of Action (NPAs), or National Environmental Management (NEM) Plans in their countries. In addition, the participating countries have invested significantly in the management of key river basins, such as the Tana and Athi River in Kenya, Incomati in Mozambique, Pangani and Rufiji in Tanzania and the Zambezi which is a transboundary river system extending into a number of countries in southern and central Africa. The participating countries will also commit more than US$53 million in baseline funding through the execution of the WIOSAP Project initiatives.

The main efforts by partners and countries that are contributing to the baseline are described Appendixes 18 and 19.

The primary 'gap' that may significantly impact on the implementation of the WIOSAP project in the WIO Region include the weak implementation of the policies, strategies and action plans. This gap can be considered to be a 'process gap' rather than a policy, planning or strategy gap as many of these instruments exist, but the process of implementation is often inefficient due to capacity limitations. For this reason the project will strive to provide support to the participating countries to implement their existing instruments rather than creating new initiatives. Of importance will be the ratification of the LBSA Protocol and its subsequent domestication in the WIO Region.

The SAP placed great emphasis in on-going national level initiatives and work programmes. The project will respond to specific country demands directly, particularly on issues that are specifically linked to national priority initiatives and existing national work programmes. For example, South Africa envisages a marine spatial planning and management exercise in order to implement its recently approved oceans policy. The Seychelles is evaluating the costs and benefits of adapting new coastal infrastructure to climate change with emphasis on sea level rise and extreme weather events in relation to new ports or coastal defences. Support for ICZM initiatives may also be required for specific areas where extractive industries may potentially threaten the protected or heritage areas such as in development of new ports and terminals proposed for Kenya, Mozambique and Tanzania.

Support for these activities would be in response to specific demands from the Nairobi Convention member countries. Rather, the project will support the effective application of the existing legal and administrative instruments and the accompanying monitoring and financing modalities for specific activities, e.g. implementation of water quality monitoring.

A significant root cause of weak implementation of legislation is that the environmental options are not effectively articulated to decision-makers. The options often do not include consideration of both short and long-term costs and benefits, the allocation of costs and benefits among public and private stakeholders, and the strategies for maintaining economic growth while securing environmental objectives and maintaining political support for sound environmental practices. Environmental champions have often emerged from a conservation ethic point of view but may not be equipped to articulate the business case for effective environmental reform and to build the political willingness required. The project will address this gap through specific activities that are aimed at building the capacity and creating increased awareness to policy makers/decision-makers and also promoting interaction between scientists and decision-makers/policy makers. The project will also address lack of effective linkages between river basin management and coastal management through specific activities aimed at building the capacity for environmental flow assessment and implementation.

Implementation of the in-country interventions was one of the key activities of the WIO-LaB project. The in-country interventions were intended to demonstrate innovative, appropriate and cost-effective technical and managerial approaches for addressing the impacts of land-based sources and activities. Using thirteen selection criteria and through a competitive process, nine in-country interventions (from Comoros, Kenya, Madagascar, Mauritius, Mozambique, Seychelles and Tanzania) were selected and provided financial and technical support for their implementation.

Between 2010, when SAP was adopted and present, the status of hotspots for critical habitats, water quality and river-coast interaction identified in each country has certainly changed as governments address critical issues, either at policy and regulatory level, or with on the ground interventions. In some cases actions have been taken by governments and non-state actors to address some of the threats identified in the TDA, while in others no major interventions may have been taken over this period. This means the 2009 baseline information is an important starting point, but may have to be updated for all proposed on the ground interventions in the 2015 situation.

Amongst the activities undertaken during the development of WIOSAP proposal was the review of the in-country interventions (Appendix 26) and based on that and a review of the potential demonstration sites listed in Annex 3b of the SAP, make recommendations of the in-country interventions to be up-scaled in the WIO-SAP project. Prioritization of the sites would have been guided amongst others on their contributions to stress reduction, their replicability, and their potential linkages, in a ridge to reef approach, with other WIO SAP implementation activities. While the review of the in-country interventions initiated under the WIO-LaB project and the development of methodology and criteria for prioritizing the in-country interventions for up-scaling during the WIO-SAP project were undertaken (Appendix 25), the prioritization of the sites to be up scaled, did not took place as the countries preferred the selection of projects to be up scaled be opened also to other projects not funded by the WIO-LaB project. For that reason, it was agreed that this issue be decided during the inception phase of the project.

2.7 Linkages and coordination with other GEF and non-GEF interventions

GEF Interventions in the WIO Region

The WIOSAP Project will compliment other GEF financed projects that will be focussed on WIO LME. This include a follow-up project known as Western Indian Ocean Strategic Action Programme

Policy Harmonisation and Institutional Reforms project (WIO-SAPPHIRE[30]) for the implementation of the aspects of the joint ASCLME-SWIOFP LME SAP that are specifically relevant to the ASCLME Project.

The UNEP WIOSAP project will address largely land-based activities by implementation of a number of activities focused on the development of regional standards for marine water quality parameters and contaminants/pollutants, marine spatial planning, ecosystem valuation, selection and monitoring of critical coastal ecosystem indicators and stress reduction related to critical habitats in the LMEs, implementation of pilot level community-based management approaches to stress reduction. These are mainly activities that cut across components A and B of the WIOSAP project. Additionally, the WIO-SAP will address activities on policy, legislative and institutional reforms within ICZM Protocol. These activities will also compliment the SAPPHIRE project particularly in its focus on policy harmonization.

The cooperative arrangements and synergies between the WIOSAP Project and the anticipated ASCLME-SWIOFP LME SAP implementation project, i.e. SAPPHIRE have been discussed by the UNEP GEF IW Task Manager (TM), the Nairobi Convention Coordinator and the UNDP Regional Technical Advisor (RTA), in September and November 2014 in Nairobi where they identified a number of opportunities for strengthened collaboration in the future amongst these projects. The dialogue during the respective project preparation exercises have ensured complementarily between the projects and political ownership through the Nairobi Convention and the South West Indian Ocean Fisheries Commission.

Opportunities for Strengthened Collaboration between WIO-SAP and SAPPHIRE

The fact that the two sister projects will start implementation at about the same time provides the two Agencies opportunities to strengthen collaboration between the two projects. Such strengthened collaboration is desired by WIO countries as well as in the one-UN context. Further, it will also help make GEF support in WIO more visible and effective.

Objective for the improved coordination:
Ensure that the existing regional frameworks such as the Nairobi Convention and the South West Indian Ocean Fisheries Commission provide policy platforms for these projects and they can most effectively support the WIO countries in advancing towards their sustainable development goals and strengthening their capacity to better manage their coastal and marine ecosystems.

Key benefits from the improved coordination:

- Coordinated actions to advance on SAP implementation
- More effective monitoring of the SAP implementation progress
- More visible impacts from the GEF resources invested in WIO
- Effective support to the countries both at the national and regional level
- Better synergies and complementarities amongst GEF projects both at the national and regional level
- More effective review and reporting process at the results level in WIO
- Better communication with UNRC/UNCT in each WIO country.

Operationalizing the Improved Coordination
A suite of platforms/mechanisms, described below, will realize the intended coordination:

Regular agency coordination meetings:

[30]The Western Indian Ocean Large Marine Ecosystems Strategic Action Programme Policy Harmonisation and Institutional Reform – A project to implement joint ASCLME-SWIOFP SAP.

A strong interagency coordination should set a foundation for good collaboration at the project level and provide strategic guidance as to how impacts from the two projects should be realized in medium to long term. It is proposed that the UNEP TM and UNDP RTA meet, together with their executing agencies, on an annual basis several months prior to the Project Steering Committee Meetings. The agenda would include preparing the PSC agenda, reviewing progress to date and identifying opportunities for synergy and coordination (as well as eliminating opportunities for redundancy and duplication) in the forward work plans. In particular, SAP revision process and SAP coordination process will be one of the key standing agenda items for the agency coordination meeting. Such coordination meetings could also involve other key partners (both agency and project representatives) active in the WIO region.

Regular PMU meetings:
Regular coordination amongst agencies will provide a vision for the Project Management Units (PMUs) of both the UNEP and UNDP projects to deliver. Both projects are expected to deliver about $2 million in project activities per year. To do so in a way that maximizes synergies and eliminates duplication will require regular coordination. It is expected that the Project Management Units (PMU) of both the UNEP and UNDP projects would meet on a quarterly basis. The PMUs of other projects active in the region would also be welcome to participate.

Joint PSC meetings:
Recognizing the complementary outputs, the UNEP and UNDP projects will be encouraged to co-convene meetings of their Project Steering Committees, with joint information sharing and exchange sessions (e.g. SAP implementation progress) and parallel sessions to treat the regular business of each project (e.g. work plan, budget). This provides country representatives opportunities to steer and contribute to better coordination of the two projects.

Joint Review meetings:
Recognizing the importance of disseminating project results at a level above the typical PSC representation, it is proposed that a WIO Joint Review Meeting be convened at Year 1, 3, and 5 of the project implementation (tentative, proposed to be every 2 years), associated with the Nairobi Convention Conference of Parties (countries are normally represented at the level of PS/DG – Minister at the COPs). Such meetings would take note of key project results, the SAP Implementation progress, and project implementation effectiveness (e.g. project review/evaluation results). In preparation for these meetings, projects would package their key results, challenges and recommendations for senior policy makers. WIO projects are held accountable by the Joint Review Committee to report their individual and collective contribution to the protection, management and development of the marine and coastal environment of the WIO region and to the sustainable socioeconomic development both at the national and the regional levels.

The other important GEF International Waters projects active in the Western Indian Ocean and in which linkages with the WIOSAP project would be important include the following:

- GEF/WB/IOC: Western Indian Ocean Marine Highway Development and Marine and Coastal Contamination Prevention (WIO Marine Highway) project,
- GEF/WB/FAO/WWF: Strategic Partnership for a Sustainable Fisheries Investment Fund in Sub-Saharan Africa.
- GEF/UNEP/UNDP: Implementing Integrated Water Resources and Wastewater Management in Atlantic and Indian Ocean SIDS (Atlantic/Indian Ocean SIDS) project.
- GEF UNEP: Dugong and Seagrass project (Enhancing the Conservation Effectiveness of Seagrass Ecosystems Supporting Globally Significant Populations of Dugong across the Indian and Pacific Ocean Basins), which includes Mozambique and Madagascar as target countries project.

- GEF-UNDP: Mainstreaming biodiversity into the production sector activities in Seychelles which has an interesting component on community managed reef fisheries.
- Global Deep Sea fishery and biodiversity project (GEF/UNEP/FAO), which targets WIO as one of the pilot regions.

The project will also complement emerging GEF-funded regional projects including the recently-approved WB/GEF SWIOFish project which includes the same participating countries linked through the SWIOFC and the proposed SAPPHIRE project which addresses ocean and offshore challenges in the same countries. There are also strong linkages to the regional GEF-funded ABNJ activities operationalized through FAO and IOTC. There are also linkages with GEF supported interventions focused on the SIDS[31] and marine and coastal biodiversity. UNEP's Division for Environmental Policy Implementation (DEPI) offers a strong foundation for the project, with its Freshwater Programme, Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA), and the Regional Seas Programme. In particular, UNEP supports the secretariat of the Nairobi Convention, the implementation of the GPA, a range of green growth, ecosystem management and environmental best practice initiatives.

The WIO Marine Highway project focused specifically on pollution originating from shipping activities (e.g. oil spills) and safety of navigation issues. It is highly complementary with the WIO-SAP Partnerships project in that the former addresses sea-based sources of marine pollution while the latter will address land-based sources of pollution. There would also be a strong synergy between WIO-SAP Project and the outcomes of the Collaborative Actions for Sustainable Tourism (COAST) project financed by GEF/UNEP/UNIDO, in that coastal tourism in the WIO region is highly dependent on environmental quality, including healthy coastal ecosystems and good water quality – both freshwater and marine. Lessons learnt by Kenya and Tanzania in the COAST Project on issues related to waste, including waste water management as well as alternative livelihood opportunities for coastal communities (mostly through nature-based tourism) will be useful to this project.

GEF Interventions in the WIO Region would be expected to jointly work at regional level in an informal arrangement that will be created within the framework of the Nairobi Convention. This arrangement is considered important for it will assist in minimising duplication of effort and wastage of resources and also help in minimising conflicts between projects. At country level, it is expected that the GEF Projects would use the same Inter-Ministerial Committees (IMCs). Other equally important projects include Biodiversity and Climate Change adaptation projects some of which have large coastal components. Examples of such projects are Coastal Resilience to Climate Change: Developing a Generalizable Method for Assessing Vulnerability and Adaptation of Mangroves and Associated Ecosystems (Tanzania) and Integrating Vulnerability and Adaptation to Climate Change into Sustainable Development Policy Planning and Implementation in Southern and Eastern Africa (Madagascar, Tanzania, Kenya, Mozambique).

Non-GEF Interventions in the WIO Region

There are also a large number of project interventions implemented by non-GEF entities, including bilateral and multi-lateral donor agencies, with which the project would need to establish linkages. These include projects undertaken under the auspices of the WIO-C since it is expected that WIO-C partners will jointly and individually be investing significantly in various conservation activities in the region. They would also participate in various regional working groups technical meetings including other forums that would be organised within the framework of the Nairobi Convention. The WIOSAP project would also work closely with other intergovernmental bodies, such as the Indian Ocean Commission (IOC) and IOC-UNESCO, which have specific activities in the region that are relevant to the goals of the WIOSAP Project and the Nairobi Convention.

[31] GEF/UNEP/UNDP *Implementing Integrated Water Resources and Wastewater Management in Atlantic and Indian Ocean SIDS*

Consortium for the Conservation of Coastal and Marine Ecosystems in the Western Indian Ocean (WIO-C)[32], which comprises a group of international and regional NGOs in partnership with intergovernmental organizations that have presence and are active in regional marine and coastal ecosystem management in the Western Indian Ocean, was officially launched at the Fifth Meeting of the Contracting Parties to the Nairobi Convention held in Johannesburg, South Africa in November 2007, with the main purpose of advancing efforts to protect, conserve, and manage the coastal and marine environment of the Western Indian Ocean region while working to alleviate poverty and attain sustainable livelihoods for the most vulnerable segments of its population.

The purpose of the Consortium is to support synergy in programmes of work on marine and coastal ecosystem management and promote knowledge and information sharing amongst stakeholders in the Western Indian Ocean region. Providing a mechanism for non-governmental entities to anchor activities in the Nairobi Convention and other intergovernmental processes and thus strengthening their implementation. To this end, the Consortiums' main activities focus on networking, coordination, lobbying, decision support, resource mobilisation, and programme development and implementation.

The WIO-C has priorities that are relevant to the WIOSAP Project particularly implementation of community-based in-country interventions, awareness creation, among others. WIO-C with its extensive network of experts in the WIO Region will also be an important source of expertise for monitoring and evaluation of project activities in the region in addition to participation in various capacity building activities. Other relevant activities would be collaboration with the project and Nairobi Convention in hosting a science-policy fora, development of policy briefs, translation of lessons learnt into actual actions on the ground, among others. In this respect, WIOSAP project will collaborate with WIO-C in the delivery of the mutually recognised priorities.

The WIOSAP project will complement the EU-COI Coastal, Marine and Island Specific Biodiversity Management in ESA-I0 Coastal States project which will focus on developing and strengthening national and regional capacity to manage the direct and indirect use of coastal, marine and island-specific eco-systems towards the sustainable conservation of bio-diversity. The second phase of the EU SMARTFish project which will address a range of marine governance issues in the region. A range of interventions by the international financial institutions (IFIs) such as World Bank, AfDB and IFAD support sustainable livelihoods in coastal areas, river basin management, sustainable cities and climate change adaptation. The project would identify the specific activities that will be undertaken in these initiatives and agree on areas of collaboration. The existing Nairobi Convention Clearinghouse and Information Sharing System for the Western Indian Ocean established under WIO-LaB project will be used as the main regional mechanism of disseminating information of project activities including the activities of various initiatives and stakeholders that would be collaborating with the project.

3 INTERVENTION STRATEGY

3.1 Project Rationale and Policy Conformity

The GEF WIOSAP Project aims to remove barriers to achieving the enhanced protection and conservation of the critical coastal and marine habitats in nine countries of the region and contribute to wider regional conservation initiatives under the framework of the Nairobi Convention.
The project contributes to UNEPs Programme of Work on "Ecosystem management" Sub-programme 3 - expected accomplishments 3(a), (b), and (c) with the aim to contribute to countries

[32] Members include: Birdlife International, Blue Ventures, CORDIO, Conservation International, East Africa Wildlife Society, Flora and Fauna International, IUCN, RARE, The Nature Conservancy, Wetlands International Wildlife Conservation Society, WIOMSA, WWF

increasingly being able to practice integrated management of terrestrial and freshwater ecosystems and mainstreaming cross-sectoral and integrated ecosystem management principles in their development and planning processes (Expected outcome (a) and expected accomplishment (b). Services and benefits derived from ecosystems will be increasingly integrated into national development planning and accounting (expected accomplishment c).
The Project will support the achievement of biodiversity conservation and poverty reduction targets at national and regional levels by contributing to targets set by participating countries in their national action plans and regional action plans (e.g. CBD Strategic Plan for Biodiversity, UNEP Regional Seas Programmes, UNEP GPA). This will yield tangible global environmental benefits in the nine countries and more widely within the Western Indian Ocean region because of the transboundary nature of the coastal and marine ecosystems.

The main barriers which the project will address are:

- Lack of coordinated approach across national boundaries;
- Weak or limited enforcement of the existing laws and regulations for the protection and management of the critical coastal and marine habitats;
- Lack of alternative livelihood systems to poor coastal communities that leads to the use of destructive practices and over-exploitation of natural resources;
- Lack of information and awareness among many coastal communities that limits their participation in integrated coastal zone management and protection of coastal and marine ecosystems;
- Lack of information and awareness among decision-makers that limits effective conservation of the critical coastal and marine ecosystems;
- Lack of institutional capacity and effective policy and planning for the implementation of interventions for effective conservation of the critical coastal and marine ecosystems. This is reflected by the lack of awareness among policy makers on the importance of mangrove forests, seagrass beds and coral reefs ecosystems and the ecological services that they provide.

The project will address these barriers under the four project components, which are described in detail in 3.4 below. The Project Components are:

- Component A: Sustainable management of critical habitats
- Component B: Water quality management
- Component C: Sustainable management of river flows
- Component D: Governance, learning and exchange

The project builds on the SAP that was delivered by the WIO-LaB Project that was successfully implemented in the eight countries of the WIO Region in the period between 2004 and 2010, within the framework of the Nairobi Convention. Lessons learnt in the implementation of the WIO-LaB project would inform the process for the implementation of the WIOSAP Project.

Through the Nairobi Convention, the participating countries have agreed to improve and maintain the environmental health of the region's coastal and marine ecosystems for the benefit of the region and its peoples. Also, through the LBSA Protocol, governments in the WIO Region have demonstrated commitment towards improvement of the approaches for managing major land-based stresses on the region's coastal and marine ecosystems[33]. The Project Objective agreed by the Contracting Parties during preparation of the PIF is:

[33] The text of the Protocol is as follows: "… to prevent, reduce, mitigate, combat and to the extent possible, eliminate the pollution or degradation of the Protocol area from land based sources and activities, using for this purpose the best practicable means at their disposal and in accordance with their respective capabilities."

'*To reduce impacts from land-based sources and activities and sustainably manage critical coastal-riverine ecosystems through the implementation of the WIO-SAP priorities with the support of partnerships at national and regional levels.*'

Three of the project components address the objectives and targets relevant to the three transboundary issues identified in the SAP, namely coastal habitats, water quality and river basin flows. The cross-cutting SAP activities – governance, learning and exchange are provided in a fourth component. The project innovatively builds on the achievements of the UNEP-GEF WIO-LaB project[34], with the primary focus shifting from the development of new instruments to implementing existing policies, strategies and plans at the national level and consolidating national efforts at regional level.

Policy conformity. The project is in full conformity with the formally agreed regional policy as its core policy objective is the implementation of the WIO-LaB SAP and the LBSA Protocol both of which reflects the outcome of an extensive stakeholder consultation process. This means that the WIOSAP project will largely focus on the specifics of the interventions and the delivery mechanisms. As the project will be implemented within the framework of the Nairobi Convention process, it will effectively form a major component of the bi-annual Work Programme of the Convention, though it will retain the necessary autonomy to ensure project efficiency and effectiveness. The project also complements the proposed ASCLME SAP Implementation Project (SAPPHIRE) and the recently-approved SWIOFish project both of which draw on GEF financing. The project is also consistent with UNEP GPA and UNEP Regional Seas Programme priorities. UNEP GPA priorities are expressed in Manila Declaration in 2012.

The WIOSAP project responds to the GEF-5 Corporate Goals 1 and 4: 'Global natural resources' and 'building national and regional capacities and enabling conditions for addressing transboundary systems', respectively, and more specifically to the GEF Strategic programme objectives for international waters 'catalyze multi-state cooperation to rebuild marine fisheries and reduce pollution of coasts and Large Marine Ecosystems'. The project also contributes to the WIO region's priorities for addressing the impacts of climate change and also supports core human and institutional capacity building in line with other GEF-IW strategic objectives. The project also directly implements the UNEP's GPA[35] at the regional level and contributes to implementation of a range of other global instruments and consensus actions developed through UNFCCC, the CBD and IMO. The project is also fully consistent with UNEP's strategic focus and sub-programmes namely 'Ecosystem Management, Environmental Governance' and 'Chemicals and waste'.

The institutional, sectoral and policy context of the WIOSAP project is drawn from GEF Corporate Goals and IW Objectives relating to GEF-5, particularly GEF Corporate Goal 1: Global natural resources and GEF Corporate Goal 4:Building national and regional capacities and enabling conditions for addressing transboundary systems. The project would support implementation of GEF IW Objective B: Catalyze multi-state cooperation to rebuild marine fisheries and reduce pollution of coasts and Large Marine Ecosystems, and GEF IW Objective C:Support foundational capacity building, portfolio learning and targeted research needs for eco-system-based, joint management of transboundary water systems.

WIOSAP Project Component C on managing river flows and to some extent Component B on water quality fall under GEF V focal area strategy IW Objective 1 outcomes on enabling States to…better balance conflicting uses of surface and groundwater for hydropower, irrigation-food security,

[34]The development goal of WIO LaB was 'to contribute to the environmentally-sustainable management and development of the West Indian Ocean region, by reducing land-based activities that harm rivers, estuaries, and coastal waters'.
[35]Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (1995).

drinking water, and support of fisheries for protein in the face of multiple stresses including climatic variability and change through flow assessments and implementation of flow assessment recommendations. Tools that provide a firm foundation for rational and sustainable management and monitoring as well as in-country interventions that reduce ecosystem stress and restore coastal habitats in Components A and B and the policy work in Component D contribute directly to the GEF V focal area strategy IW Objective 2 outcomes on: National and local policy, legal and institutional reforms to reduce land-based inputs of nitrogen and other pollutants and secure coastal/marine habitat. Demonstration activities in Components A and B contribute substantially to stress reduction.

Country commitment. The WIOSAP project has maximum support of governments in all participating countries. This has been ensured through wide consultation with the governments during the process of development of the project including also full integration of the priorities of governments into the project activities. The participating countries have also demonstrated commitment to the project objective in several ways including through ratification of Nairobi Convention and its Protocols and related international instruments; through development and implementation of national environmental action plans; through national and local investments including those in municipal wastewater and river basin and coastal zone management; and through inclusion of marine and costal environmental management investments in the country programmes of other development partners (such as WB, EU, AFD and Nordic countries).

In country interventions. Building on the lessons learnt during the implementation of in-country interventions under the WIO-LaB project, the WIO SAP project will develop a rigorous and consultative process and criteria that will be used to identify innovative on the ground interventions that are designed both to achieve such impact at a local scale and to catalyse scaling-up to magnify the impact. The validation meeting held in Nairobi, Kenya in November 2014 discussed extensively the process and criteria that could be used to select these interventions, to be supported during the implementation of the WIO SAP project. The meeting unanimously agreed that the selection of the on the ground interventions to be supported under the WIO SAP project should be based on the SAP, however, identification and funding will only be made after a rigorous selection criteria has been developed and approved by the Project Steering Committee from participating countries. The meeting proposed that on the ground interventions should be catalytic in nature, with strong emphasis on institutional strengthening and financial sustainability by building on synergies and opportunities available or ongoing, at national and regional levels across the proposed components and with the involvement of key actors such as environment, planning, or water ministries and local councils.

They further stressed that the selection criteria should be based on priorities defined in the SAP as well as country priorities and participation and taking into consideration sector and geographical differences of the countries of the WIO region.

3.2 Global environmental benefits

The global significance of the WIO region is highlighted by the fact that compared to the linked Coral Triangle region, which is under significantly greater stress from exponential increases in population, exploitation, pollution and development pressures, many of the WIO region's ecosystems and resources are still relatively intact and in good health. This presents a window-of-opportunity for intervention now, so as to prevent further degradation of the WIO region. If protected and sustainably managed now, the WIO region may act as a 'refuge' or 'reserve' ecosystem in support of efforts to turn-back resource degradation in the Coral Triangle. The 'relatively' pristine nature of the WIO region compared to other parts of the world also presents a significant but rapidly diminishing opportunity to implement and demonstrate best-practice sustainable management of coastal and marine resources, with lessons and benefits for other regions, before it is too late.

Apart from its connections with the broader Indo-Pacific, the WIO region is also oceanographically and biologically connected to another of the last remaining, 'relatively' pristine and undeveloped

marine ecosystems on the planet, the Southern Ocean. The Southern Ocean is itself beginning to experience increasing impacts from human use, including pollution and over-exploitation of living marine resources.

Socio-economic conditions and development indices in many of the WIO countries are amongst the lowest in the world, and the region is therefore globally significant in terms of achievement of the United Nations MDGs and sustainable development generally. Continued degradation of the region's valuable and productive coastal and marine resources, will only serve to hinder achievement of socio-economic development, while sustainable management of these resources will make a major contribution to poverty alleviation and to a brighter socio-economic future for the people of the region.

The global significance of the region is also highlighted by the fact that it is given a very high priority by many bi- and multi-lateral donors, which also provides excellent prospects for co-financing of the GEF intervention.

Finally, the global significance of the region is highlighted by the potential impacts of global climate change, with numerous studies and reports identifying that countries in the region, including the Small Island Developing States, are amongst the most vulnerable to climate change impacts, and stand to experience severe environmental, ecological and socio-economic disruptions from such impacts compared to many other parts of the world.

Given that the in-country interventions are at this stage not clearly defined; due care will be taken by the PMU to complete the environmental and social safeguards (ESS) as these on the ground interventions are identified and developed referring to the official checklist as part of ensuring fiduciary standards during selection of on the WIOSAP ground interventions.

The contribution of the project in the identification of good practices, approaches and methodologies for the effective management of the coastal and marine ecosystems will also be of benefit to other IW projects that would be implemented in other parts of the world, particularly in relation to restoration of coastal ecosystems, wastewater management, economic valuation of coastal ecosystems, marine spatial planning, and integration of environmental flow assessment in the management of river basins. This will also lead to an improvement in the effectiveness of other conservation projects in the WIO Region since their activities will be designed bearing in mind the lessons and experiences learnt in the WIOSAP Project.

Thus, in summary, it can be noted that the global environmental benefits will accrue on various levels. It is expected that through improvements in coastal and marine habitats, water quality, inclusion of environmental flow assessment in river basin management, improved capacity, and implementation of appropriate legislation, direct local economic, social and environmental benefits will be generated and these will maintain the integrity of the ecosystems so that they can continue to yield global environmental benefits. The other global benefits include mitigation of climate change through conservation of wetlands, seagrass beds and mangroves and to a limited extent the conservation of coral reefs and Ramsar sites. The awareness and capacity building activities that will be undertaken by the project in participating countries are also expected to influence the integration of coastal and marine issues in regional economic communities (RECs) such as the IOC/COI, EAC, COMESA, and SADC including the African Union (AU). Similar integration is also expected among global environmental organisations/conventions.

3.3 Project Goal and Objective

The goal of the WIOSAP Project is to improve and maintain the environmental health of the region's coastal and marine ecosystems through improved management of land-based stresses. The specific project objective [as per the PIF] is to.

'*To reduce impacts from land-based sources and activities and sustainably manage critical coastal-riverine ecosystems through the implementation of the WIO-SAP priorities with the support of partnerships at national and regional levels.*'

3.4 Project Components and Expected Results

The WIO-SAP project identified four (4) Component areas of action that are linked to the main areas of concern identified in the WIO-LaB TDA and SAP for the protection of the WIO Region coastal and marine environment from land-based sources and activities. The main outputs from these components will focus on key areas that are considered to be priority by the participating countries. In some of the components, pilot in-country interventions will be used to promote best practices in the restoration of degraded critical coastal and marine ecosystems as well as appropriate technologies and approaches for the treatment of wastewater and effluents. Appendix 7 provides an analysis of linkages between issues identified in the TDA and the SAP.

The components A to C of the project are focused on the three physical objectives of the SAP, which are healthy critical coastal habitats, clean waters and sustainable river flows. Component D mainly aims at enhancing stakeholder's collaboration to address priority transboundary issues and challenges. The components are largely complementary to each other and broadly, have similar structure involving: (i) monitoring and assessment of priority targets and (ii) investments and capacity building to manage important land-based environmental stresses. For each of the physical objectives, specific priority geographical targets (e.g., bays, reefs, watersheds) were identified during the PPG phase.
The following sections provide detailed description of each of the project components.

Component A: *Sustainable management of critical habitats*
Component A focuses on the protection, restoration and management of critical coastal habitats and ecosystems. This component recognizes the enormous value of healthy coastal and marine habitats for the well-being of people in the WIO region. The component provides an agreed regional approach for the participating countries to launch specific actions to achieve targets defined in the SAP. It addresses the SAP Environmental Quality Objective: critical coastal habitats in the WIO Region protected, restored and managed for sustainable use. There are short-term (within five years) targets set in the SAP in relation to this component:

- Guidelines and standards developed and published, and incentive schemes developed, negotiated and adopted by stakeholders and countries;
- Governments and other institutions initiated spatial planning of coastal and marine areas as part of national development plans; priority sites identified and described; comprehensive vulnerability assessment and spatial planning conducted for priority issues and guidelines for zoning developed and implemented;
- Critical habitat management in all countries reviewed and contribution to regional protection documented; international best practice for critical habitats, associated and tailored for local application; "other" critical habitats, associated diversity and status inventorised; and scientific information on critical habitat dynamics (e.g. seagrasses) improved;
- Key indicators, e.g. Environmental State Indicator (ESI) and ecological indicators, and baseline status of critical habitats developed and agreed on; baseline (GIS) map of coastal zone resources, land use and critical ecosystems developed; long-term monitoring plan based on agreed targets of coastal zone land-use developed and implemented;
- ICZM status in the region assessed, and technical support to develop and/or update ICZM legislation in selected countries provided; and an ICZM Protocol for the Nairobi Convention developed and adopted;
- Clear documentation of international structures that reflect international liaison relating to transboundary critical habitat issues developed for each country; opportunities identified and

recommendations made to strengthen national obligations towards improving regional management of critical habitats; and relevant legislation within and among WIO countries strengthened and harmonized; and

- Communication plan on critical habitats developed and implemented; coastal and marine environmental education introduced to school curricula; at least two flagship sites identified and developed per critical habitat in the region; and economic valuation of critical habitats and their services undertaken.

The component represents a set of activities that aims at halting further degradation of the coastal and marine ecosystems. It also represents a suite of activities and deliverables in support of development of critical habitat management strategies contributing to sustainable provision of ecosystem services and goods. These include the promotion of best practices in coastal habitat management, restoration of degraded ecosystems in key priority hotspot areas identified in the TDA which include many priority areas that were recognized through Nairobi Convention and other processes such as the East African Marine Ecoregion process. It also includes activities on coastal zoning based on integrated economic, social and environmental considerations. The component will receive most of the funding from GEF, UNEP and participating countries. As such the Component represents specific priority management issues in the WIO Region that need to be addressed urgently in order to deliver the SAP.

WIO countries are at different stages of developing and implementing National Plans of Action (NPAs on LBSA) and Integrated Coastal Zone Management (ICZM) Plans. These plans will contribute substantially to the sustainable management of critical coastal and marine ecosystems and habitats in the WIO Region. The baseline contributions by the participating countries and their partners will support the development of tools, methodologies and assessments in support of the national processes, including economic valuation, guidelines for spatial planning and vulnerability assessment, livelihood strategies on extractive use activities and a nationally established monitoring framework with indicators. The development and implementation of these tools and methodologies will provide an important foundation for regional collaboration and harmonized management within the region. Particular attention will be given to the widest participatory approach possible and ensuring the particular socio economic dimensions and gender specific needs. The GEF increment will strengthen the collaborations and cooperation to develop methodologies and tools that should be aimed at addressing transboundary and global environmental issues in the region, as well as pilot test these methodologies and tools through on-the-ground activities related to spatial planning, site-specific management interventions and habitat restoration.

Component B: ***Improved water quality***

The degradation of the quality of the coastal and marine waters in the WIO Region is a growing problem as elaborated in the TDA. The main source and cause of water quality degradation in the region is the discharge of untreated municipal wastewater and effluents. This in some areas is already threatening human health and integrity of the coastal and marine ecosystems. Monitoring pollutant loads and treatment of wastewater discharges to acceptable standards will help sustain ecosystem functions and the livelihoods of the local communities. Component B therefore focuses on the need for the WIO Region's water quality to attain international standards by the year 2035. There are short-term targets set in the SAP in relation to this component:

- Regional effluent standards developed and regionally harmonized;
- Regional marine water quality standards developed and regionally harmonized;
- Regional best practice framework models for municipal wastewater management developed and adopted;
- One pilot wastewater treatment plant in each WIO country;
- One pilot industry in each WIO states adopts Cleaner Production Technologies; and
- Tools for stakeholder sensitization developed and used, and the benefits of reducing coastal and marine pollution demonstrated.

The component represents a suit of deliverables and activities aimed at promoting best practices for the wastewater and effluents management in the WIO Region including formulation, harmonisation and implementation of appropriate regional and national marine receiving water standards. It also includes deliverables and activities aimed at building the capacity of national institutions on various issues related to the management of wastewater and land-based pollution, through development of bankable proposals for the development of wastewater treatment systems. While these activities in themselves do not reduce stress, they provide a crucial foundation from which the effectiveness of overall water quality management at local, national and regional scales and the efficacy of specific site interventions can be assessed.

The baseline projects will contribute to the development of a national regulatory framework for monitoring pollutant loads, effluents and water quality standards of receiving coastal waters for the WIO region and any on-going and planned activities to introduce good practices on wastewater management. The GEF increment, along with national and regional baseline activities, will also support demonstrations of appropriate, cost-effective technologies (such as constructed wetlands) for wastewater and effluent treatment as well as human and regulatory capacity building for monitoring, replication and up scaling of these in-country interventions to address the transboundary wastewater and other land-based sources of pollution. Particular attention is given in the criteria for the selection of the on-the-ground activities to integrating specific gender specific needs. A number of demonstration sites will be prioritized according to, amongst other criteria their contributions to stress reduction and their replicability. GEF funds will catalyze national and WIO-C co-financing to these in-country interventions. The pilot in-country interventions for wastewater and effluent treatment will focus on any country in the region depending on the significance of the suggested hotspot sites.

Component C: ***Sustainable management of river flows***

Component C thus aims at promoting wise management of river basins in the WIO Region through implementation of a suite of activities for building the capacity in the WIO Region for Environmental Flows Assessments (EFA) and implementation through adoption of appropriate EFA methodologies and their application in specific river basins in the region. The component addresses the WIO-SAP Environmental Quality Objective: River flows in the WIO region are wisely and sustainably managed.
There are short-term targets set in the SAP:

- Awareness of EFA as a tool for wise river basin management raised; and best-practices guidelines for EFA developed;
- Capacity for applying EFA amongst key stakeholders increased;
- Priority river basins identified and regionally and nationally agreed upon, and EFA conducted in selected basins;
- Short-comings in existing national policy, legal and institutional frameworks identified and updated; linkages between national river basin management and coastal water management organisations established, and forums for inter-sectoral discussion, cooperation and joint planning (at ministerial as well as stakeholder level) established;
- Assessment of the impacts of impoundments, and dam operation on river flow variability as well as related coastal marine impacts conducted for priority river basins;
- Assessment of key wetlands and their functions conducted;
- Riverine and coastal zone management plans adopted and implemented, and stakeholder involvement in river-basin management strengthened.

The component aims at ensuring healthy, functioning rivers necessary for sustaining coastal critical habitats and ecosystems including provision of clean freshwater to coastal communities in the WIO region. This will ensure that rivers, wetlands and coastal areas in the WIO Region continue to provide ecosystem goods and services.

GEF finance will mainly support flow assessment in-country interventions in at least two key river basins in the WIO region where there are strong linkages between river flows and the sustainability of critical coastal and marine ecosystems and resources. The river basins that will be targeted were identified by stakeholders through consultative workshops. These candidate basins include: Tana and Athi River Basins in Kenya, Pangani Rive and Rufiji River Basin in Tanzania, Inkomati River Basin in Mozambique and South Africa, Thukela and Breede/Overberg River Basins in South Africa. The criteria for selecting the appropriate river basins for flow assessments are: (i) direct linkages between river flows and sustainability of coastal and marine ecosystem goods and services, (ii) contributions of the riverine and coastal ecosystem goods and services to the livelihoods of local communities and national economies, (iii) ability of the site to connect to and complement demonstrations on coastal habitat management and water quality (components A and B), (iv) extent of degradation and pressure on natural resources, (v) listing as a national priority by participating countries and (vi) availability of other partners. Detailed criteria for selecting river basins for EFA activities will be developed during the initial phase of implementation of the project.

Through participatory process, the flow assessment studies will develop and explore scenarios depicting the environmental, economic and social trade-offs amongst the main competing water demands. The EFAs will assist policy makers and river basin managers to appreciate the environmental and socio-economic implications and trade-offs of their water investments, and serve as a basis for negotiating an equitable trade-off between development of river basins and the protection of critical coastal and marine ecosystems.

The project will also support the implementation of flow assessment results and recommendations in selected river basin, in a consultative and participatory process. Building on the good foundation provided by WIO-C and other partners, river basin organizations will be provided with technical assistance to support the consultation process and implement the flow assessment recommendations. The specific river basin organisations that have been identified include TARDA in Kenya, RUBADA and PBWO in Tanzania, Inkomati Catchment Management Agency (ICMA) in Mozambique, Komati Basin Water Authority (KOBWA) and Breede/Overberg Catchment Management Agency (BOCMA) in South Africa. Building on the achievements of the WIO-LaB Project in this area, WIOSAP project would also engage a number of regional institutional arrangements such as the arrangements between South Africa and Mozambique with regard to the management of Inkomati river basin through a Tripartite Technical Committee (TPTC) which is responsible for the realization of the IncoMaputo Agreement (PRIMA) initiative. During the PPG phase, IUCN carried out consultations with relevant government agencies in Kenya, Tanzania, Mozambique and South Africa. These country consultation processes identified stakeholders relevant to environmental flow management, determined the existing status and effectiveness of national and basin environmental flow management framework, and identified barriers to improved environmental flow management which informed the project design. The consultations also identified potential river basins that could be targeted by the project and also identified possible co-funding initiatives and opportunities.

The river basins with a good potential for yielding significant outcomes in implementation of EFA outcomes include Pangani River basin (with the support of IUCN, GEF and EU); and Wami basin (through the support of Florida International University, USAID and Coca-Cola) in Tanzania; and the transboundary Zambezi River basin (with the support of ZAMCOM, WWF, World Bank, the International Rivers Network, among others). Some of the basins will also provide opportunities of linking with the in-country interventions on the coastal management and water quality (components A and B). GEF funds will catalyze national actions and WIO-C co-finance to these activities.

Component D: ***Governance and Regional Collaboration***

Component D will focus on strengthening governance and awareness in the WIO region with a view to facilitating sustainable management of critical coastal ecosystems and habitats. Inadequacies in governance frameworks are considered to be one of the main root causes of the degradation of the critical coastal and marine ecosystems in the WIO region. This has negative impacts on the people and the economies of countries in the region. The component focuses on the SAP Environmental

Quality Objective that aims at ensuring that 'by 2015, stakeholders in the WIO region will collaborate effectively at the regional level in addressing transboundary challenges'. The component addresses one of the main root causes of degradation of the coastal and marine environment in the WIO Region.

The short-term targets related to this component are:

- Capacity building strategy developed and implemented; mechanisms for regional and national networking and lessons-learnt sharing established; and regional guidelines for ICZM, IRBM, developed; in the development of the capacity building strategy particular attention will be given to the widest participatory approach possible and ensuring the representation of specific socio economic dimensions and gender specific needs.
- Regional framework for coastal area legislation developed, and national legislative frameworks updated;
- Regional communications strategy developed and implemented; and awareness of target groups raised;
- Regional legal framework harmonized, model national legislation for key issues/sectors developed, and national legislation consistent with regional framework;
- Enhanced cooperation between the Nairobi Convention and regional economic/trade organisations (e.g., SADC, IOC, EAC, etc.) on issues of common concerns; and enhanced capacity for negotiating multilateral environmental agreements (MEAs);
- Regional resource mobilization strategy developed and demonstrated, and mechanisms for regional and national networking and lessons-sharing between practitioners, academics and policy makers established;
- Existing information on critical habitats integrating into the existing Nairobi Convention Clearing House Mechanism; a comprehensive and integrated regional database in place and strengthened with information on Critical Habitats, Pollution and River Basins; and informative policy briefs developed based on existing information.

The component recognises that governance and management problems hamper successful responses to transboundary problems that impact on the coastal and marine environment. It addresses key governance problems in the WIO region that were identified in the SAP, namely, poor coordination, inappropriate and incoherent legislation and lack of adequate institutional frameworks for managing developing pressures/stresses, poor information management, and lack of adequate financial resources and mechanisms. The component has a suite of deliverables and activities aimed at building the capacity for effective environmental governance through enactment of appropriate legal and regulatory frameworks for LBSA management at regional and national. This will be achieved through finalisation of the formulation of ICZM Protocol that was initiated under the auspices of the EU ReCoMap project, and implementation of LBSA Protocol as well as creating awareness among policy makers on the need for the protection and management of the coastal and marine environment in the WIO Region. Model legislation, policy briefs, implementation guidelines and training for policy makers, will support the processes for the formulation of the ICZM Protocol and the ratification of LBSA protocol that was delivered under the WIO-LaB Project. Inter-ministerial committees and regional task forces established within the framework of the Nairobi Convention will also be strengthened so that they are able carry out their specific roles in the implementation of project activities.

WIO SAP implementation will bring on board various partners in the WIO Region and the project management will be expected to ensure effective project coordination, regular steering committee and task force meetings including also provision of quality technical support to participating countries. The project management team will also participate in relevant regional and international fora for lessons learning and exchange, including IW:Learn events. The project will set aside a minimum of 1% of the GEF grant for this purpose. Also, data and information management and exchange platforms particularly the Nairobi Convention Clearing House Mechanism established within the auspices of the WIO-LaB Project, will be instrumental in awareness creation and education for stakeholders in the region. The GEF increment will considerably increase the value of the

investments of national and regional partners, promoting a shared sense of regional responsibility for the sustainable management of the coastal and marine ecosystems through harmonized regional policy, norms and standards and shared learning and experiences.

In conclusions, all the four (4) Components (A, B, C and D) work in concert to build WIO Regional capacity for sustainable management of the coastal and marine environment in order to guarantee sustainable provision of ecosystem goods and services and global environmental benefits to the present and future generations. The four Components represent priority short-term regionally agreed deliverables and activities endorsed in the SAP delivered by the WIO-LaB Project. The focus is on delivering on priority short-term (5-year) activities that have a potential to yield tangible outcomes for sustainable ecosystem-based management and governance in the region. Most of the outputs for SAP Implementation would be delivered through partnerships, facilitation and coordination by existing national and regional bodies established within the framework of the Nairobi Convention. The Stakeholders Participation Plan presented in Section5of this document details the various stakeholders and/or actors that would be engaged in the implementation of activities detailed in the main components of the project.

The following section presents details on the specific outputs and outcomes for each of the project components. The section also provides details on the specific activities that would be undertaken in order to deliver specific project outputs and outcomes, including the implementation arrangements. The deliverables and benchmarks are provided in tabular form in appendix 6.

COMPONENT A: SUSTAINABLE MANAGEMENT OF CRITICAL HABITATS

GEF Funding: US$ 3,488,000 **Co-financing: US$ 40,329,543**

Outcome A.1: Appropriate tools and methodologies are used to manage critical coastal and marine habitats in order to enhance their resilience and long-term sustainability

OUTPUT A.1.1: National institutions undertake participatory spatial planning to increase the resilience of selected key coastal ecosystems to anthropogenic impacts including the impacts of climate change and variability.

Output Descriptions: The primary aim of this Output is the provision of support to the participating countries and partners in the WIO Region to select priority critical coastal and marine habitats and develop their spatial plans through participatory processes. The project will aim at enhancing the capacity of at least five (5) countries in the WIO region to develop marine and coastal spatial plans consistent with the requirements of the WIOSAP. Spatial plans will be prepared for at least five (5) key marine and coastal zones in selected participating countries in the region. Priority will be given to hotspot sites identified by governments of participating countries during the implementation of the WIO-LaB Project including also during the African process. The Output will enhance the capacity of the WIO countries to increase the resilience of key coastal ecosystems to the human impacts including the impacts related to climate change and variability. The preparation of spatial plans is considered important in the WIO Region countries in view of increasing, often conflicting multiple uses of coastal and ocean spaces which is creating challenges for sustainable management of coastal and marine environment. Furthermore, only a few countries in the WIO Region have capacity for the development and implementation of marine spatial plans. This activity will take advantage of the relevant policies and planning processes already existing in target participating countries.

Since Somalia was not involved in the WIO-LaB project and with the improvement of the security situation in the country, the Validation Meeting held in November 2014 in Nairobi, Kenya decided that specific activities targeting Somalia be included in the proposal.

Activity: A1.1.1 Development of marine spatial plans for at least five priority coastal and marine zones and associated capacity building.

The priority coastal and marine zones will be selected according to the process proposed in Appendix 25. Further the project will:

- Provide technical and financial support to the relevant institutions in target countries to engage key stakeholders and develop and implement marine spatial plans for selected priority coastal zones/hotspot areas.
- Provide technical and financial support the target countries to produce marine and coastal spatial plans to demonstrate the utility and applicability of the regional guidelines to policy makers and coastal communities, the value of coastal spatial planning in preventing and resolving conflicts between major users of coastal areas (both inshore and offshore) and some major coastal activities.
- Organise specific national and regional training workshops on the development of marine and spatial plans.
- Provide Geographic Information System (GIS) and remote-sensing equipment and software to relevant institutions in target countries.
- Provide technical and financial support to participating countries to enable them formally adopt and domesticate the regional marine and coastal spatial planning guidelines.

OUTPUT A.1.2: Management plans developed and adopted for at least five (5) key critical coastal and marine habitats, reinforcing the regional MPA network and mitigating habitat loss and climate change impacts.

Output Descriptions: The aim of this primary Output is the development and adoption of management plans for at least five (5) key coastal and marine ecosystems in at least five target countries in the WIO Region within the overall marine and coastal spatial planning framework to be established under Output 1.1.1. The main focus for this activity would be on the critical coastal and marine ecosystems that have potential of yielding significant regional and global benefits through enhancement of their management systems. This output will involve close collaboration between public institutions with conservation mandate, NGOs and CBOs including also the private sector (tourism, mining, fishing, transport, etc.). This output will reinforce the network of the Marine Protected Areas (MPAs) in the WIO region under the Nairobi Convention SPA Protocol and also mitigate the impacts of climate change and habitat loss due to unsustainable practices. This output will also contribute in enhancing the capacity of countries in the WIO region to develop coastal ecosystems management plans, consistent with the requirements of the WIO SAP as well as their national priorities.

Activity: A.1.2.1. Development and implementation of management plans in three (3) priority sites of representative critical coastal and marine habitats and priority coastal zones.

The three sites will be selected according to the process proposed in Appendix 25. Further the project will pprovide technical and financial support to relevant institutions in participating countries to participate in the process for the development of management plans for specific coastal and marine ecosystems of regional importance and also explore the mechanism of integrating these management plans in their national planning processes.

OUTPUT A.1.3: At least one key degraded critical coastal habitats restored and resilience increased.

Output Descriptions: The aim of this primary Output is the restoration of degraded coastal and marine ecosystems and or habitats in selected participating countries in the WIO region in order to increase their resilience. The national institutions in participating countries working in close

collaboration with NGOs and CBOs will select priority coastal and marine habitat hotspots according to established and agreed criteria and develop and implement pilot in-country interventions for their restoration. By restoring the degraded critical ecosystems (such as mangroves, seagrass beds and coral reef) and increasing their resilience to the impacts of climate change, provision of ecosystem goods and services will be guaranteed on long-term basis and this will contribute in sustaining livelihoods of coastal communities and therefore increase their economic well-being in the long-term. The restoration of ecosystems will also contribute in the realisation of global environmental benefits. This output will enhance the capacity of participating countries and institutions to restore degraded coastal and marine critical habitats. The output will also contribute in mitigating the impacts of climate change in participating countries. The achievements of this output will be appropriately be disseminated to policy-makers in order to influence the formulation of appropriate coastal management policies and also replicate the restoration projects in other equally important sites in the target countries. To ensure sustainability of the restoration interventions, the WIO SAP project will require the projects seeking funds for restoration to provide clear justification for restoration as the best option available, root causes of the degradation are known and have been addressed and likely impacts of climate change have been factored in the project design. They will also need to design a monitoring programme of the restoration activity and have good adaptive management options in place.

Activity: A.1.3.1. Identification and implementation of restoration programmes in at least one (1) priority degraded critical coastal and marine habitat.

The process proposed in Appendix 25 will be used to select the priority site. The project will also:

- Provide support to participating countries to implement pilot ecosystem restoration projects in collaboration with CBOs and NGOs in selected hotspot sites.
- Provide financial support to participating countries to disseminate the results of pilot ecosystem restoration projects in collaboration with CBOs and NGOs.

Activity: A.1.3.2. Development of guidelines, documentation of best practices and capacity building for restoration of degraded critical habitats.

The process proposed for the delivery of activities is as follows:

- Engage an international consultant to work jointly with national experts and PADH Task Force to prepare technical guidelines and or manuals for the restoration of mangroves, seagrass beds and coral reefs.
- Establish in each of the target countries, PADH Working Groups to monitor the implementation of pilot ecosystem restoration projects, document key lessons and best practices and disseminate them same at national level.
- Organise regional training workshops on the restoration of degraded coastal and marine ecosystems.
- Organise regional workshops for experts in the region to share experiences and lessons in the restoration of degraded coastal and marine ecosystems/habitats in participating countries.

OUTPUT A.1.4: Pilot actions to build capacity in ICM, demonstrating how ICM can be strengthened at the local level through the empowerment of communities and other actors at demonstration sites (under A.1.1 and A.1.2).

Output Descriptions: The primary aim of this Output will be pilot actions that are intended to build the capacity in the formulation and implmentation of Integrated Coastal Management (ICM) plans including building the capacity for ICM implemntation at local level. This output will also enable the participating countries to demonstrate the value of ICM in selected coastal zones (where pilot in-

country interventions will be implemented) through enhanced engagement of local communities and other actors, particularly the NGOs. The key output will also be realised through regional and national consultative workshops intended to provide representatives of local community groups, policy makers and ICM practitioners with an opportunity of sharing experiences, lessons and best practices at regional level. Training workshops targeting policy makers and ICM practitioners in participating countries will also be organised as part of an effort to build capacity for ICM implementation. ICM success will be upscaled or replicated in other priority coastal zones in target participating countries. These activities will possibly be implemented in combination with the spatial planning demonstration activities.

Activities: A.1.4.1. Support up-scaling and replication of ICM and associated capacity building in at least three (3) priority sites.

The process proposed described in Appendix 25 will be used to select the three priority sites. Also the project:

- Hold regional and national consultative workshops for sharing of experiences, lessons and best ICM practices at regional level including community participation and engagement in ICM.
- Provide technical support to appropriate national institutions with mandate on ICM in participating countries to replicate successful ICZM in-country interventions in other priority areas with support of the local communities and other partners.
- Engage a consultant to facilitate regional capacity-building workshops on ICM including sharing of lessons on the implementation of ICM at regional level.
- Engage national experts to compile lessons on the application of ICM,including success stories and share the same with national ICZM Committees and policy makers in participatinmg countries.

OUTCOME A.2: Appropriate tools and methods (which integrate economic, social and environmental considerations) support coastal planning and management.

OUTPUT A.2.1: Economic valuation of at least three (3) key critical coastal and marine habitats including integration of economic valuation to coastal management and planning.

Output Descriptions: The primary Output will be establishment of the economic value of key critical coastal and marine ecosystems in the WIO region, including also the integration of economic valuation principles in coastal management and planning in participating countries. The output will also establish the contributions of economic valuation to the sustainable management of coastal and marine ecosystems and enhancement of their resilience to the impacts of climate change and variability, through increased understanding of their value by policy makers. The sustainable management of the coastal and marine ecosystems in the WIO region have in the past been constrained by lack of data and information on the value of the critical coastal and marine ecosystems such as coastal forests, mangroves, seagrass beds, coral reefs, etc. This has been occasioned by lack of capacity to carry out economic valuation studies in most of the participating countries. This output will therefore contribute in building the capacity for economic valuations of critical coastal and marine ecosystems in the WIO region and it will also create increased awareness on the importance of conservation and protection of the coastal and marine ecosystems within the government decision-making systems. The project will aim at establishing the economic value of at least one coral reef, mangrove forest, seagrass bed and coastal wetland ecosystem, as part of a participatory ICM planning and spatial planning process (A.1.1.1 and A.1.1.4). The pilot sites under these activities may also be subject to economic valuation under this component.

Activity: A.2.1.1 Application of economic evaluation methodologies in least two (2) priority critical habitat sites with particular reference to vulnerable areas (including but not limited to the northern Mozambique Channel).

The process proposed described in Appendix 25 will be used to select the priority critical habitat sites. The project will also:

- Provide support to appropriate institutions and their experts in participating countries to carry out out economic valuation of at least three priority critical coastal and marine ecosystems, in consultation with the local communities and other partners.
- Organise training workshops to carry out the economic valuation, and through these workshops, actual pilot economic valuations will be conducted.
- Organise regional workshops for sharing of lessons and experiences on economic valuation of coastal and marine ecosystems.
- Provide financial support to participating countries to disseminate lessons learnt and create awareness on the economic value of critical coastal and marine ecosystems to policy makers in order to facilitate effective decision making for conservation and protection of coastal and marine ecosystems.

OUTPUT A.2.2: Tools and guidelines for vulnerability assessment and spatial planning supports monitoring and management actions.

Output Descriptions: The primary aim of this output will be tools and guidelines that will be used by the institutions in particpating countries to carry out ecosystem vulnerability assessment studies as well as support coastal monitoring and spatial planning processes at national level. The ouput will contribute in building the capacity for vulnerability assessments and spatial planning to support management and monitoring of the state of coastal ecosystems in participating countries institutions. In the WIO region, the capacity for vulnerability assessment and spatial planning is generally weak and need to be enhanced as a matter of urgency. Thus, the project will undertake specific tailor-made activities that are aimed at building the capacity in the WIO Region for assessment of the vulnerability of coastal ecosystems to climate change. This output will also enhance the use of the Nairobi Convention Clearing House Mechanism (CHM) developed under the auspices of the WIO-LaB Project. The CHM will particularly be invaluable in the dissemination of the tools and guidelines for ecosystem vulnerability assessment and spatial planning. The updated Nairobi Convention Clearing House Mechanism will also play an important in the exchange of data and information on the implementation of the water quality and ecosystem health monitoring programme. The system will also facilitate exchange of lessons and best practises

Activity: A.2.2.1 Development of tools and guidelines for vulnerability assessment to climate change and for spatial planning at the regional or sub-regional scale (e.g. northern Mozambique Channel) (and where necessary develop new guidelines) and support their application.

The process proposed for the delivery of activities is as follows:

- Engage an international consultant to work jointly with the regional experts/PADH Task Force and ICM Working Group to develop regional guidelines and methodologies for ecosystems vulnerability assessment and for spatial planning in participating countries (cross-linked with A.1.1).
- Provide support to participating countries to establish national technical working groups to review, adapt and integrate into appropriate national strategies, programmes or plans, regional guidelines and methodologies for ecosystems vulnerability assessment and spatial planning (also see A.1).

- Provide support to national institutions to integrate tools and guidelines for vulnerability assessment and spatial planning into national ecosystem monitoring and management programmes.

OUTPUT A.2.3: Sustainable livelihood strategies regarding extractive use activities developed and adopted for specific coastal and marine natural resources.

Output Descriptions: The primary aim of this Output is the development of sustainable livelihood strategies for extractive use of coastal natural resources and implementation of the same in collaboration with local communities who are dependent on these resources. The output will also involve promotion of alternative sustainable livelihood systems for the local coastal communities in order to curtail the degradation of the coastal and marine ecosystem occassioned by over-dependency on limited coastal natural resources[36]. There are number of initiatives that have been undertaken in the region with the intention of providing alternative livelihood to coastal communities, including some by GEF-funded projects such as the COAST Project and the ASCLME project. Some of the WIO-C members have also conducted livelihood assessment and supported different types of alternative livelihood as well. In this output, in-country reviews will be conducted to identify alternative livelihood that have shown promising results and have high potential for replication and upscaling. Amongst criteria that will be used to identify successful alternative livelihood activities include: the extent of involvement of beneficiaries, gender, sustainability, and measurable impacts on environment.

Activity: A.2.3.1 Development of alternative livelihood strategies for resources in critical areas and working with communities dependent on resources to implement the strategies.

The process proposed for the delivery of activities is as follows:

- Provide financial support to national institutions in participating countries to carry out review studies on the current practices on the extraction or use of key coastal and marine natural resources and develop strategies that will enhance the sustainable use of coastal and marine ecosystems.
- Provide support to institutions in participating countries, through participatory process, to develop alternative livelihood strategies and disseminate best practices/guidelines for coastal and marine natural resources, including both renewable (e.g. mangrove poles, fish, etc.) and non-renewable resources (e.g. mineral sands, gravels, etc.).
- Engage national experts to review and disseminate the existing guidelines on fisheries and aquaculture in relation to A1 activities in close collaboration with FAO and other fisheries projects in the region.
- Provide support to appropriate national institutions, local community-based organisations and NGOs to adopt and implement the guidelines on fisheries and aquaculture.
- Provide technical and financial support to appropriate national institutions to work jointly with CBOs and NGOs to implement the proposed extractive use strategies in specific coastal areas in participating countries.

OUTPUT A.2.4. Adoption of regional indicators and baseline assessment in support of critical habitat monitoring and management.

Output Descriptions: The aim of this Output will be development of regional indicators for the monitoring and management of the coastal and marine ecosystems including also implementation of baseline ecosystem assessment studies. The development and adoption of regionally agreed indicators

[36]Semesi., A.K (1998): Mangrove management and utilization in eastern Africa. *Ambio***27**:620-626.

and monitoring protocols will allow national and regional institutions to monitor changes in the state of the coastal and marine ecosystems and services provided and assesss the effectiveness of various intervention measures implemented in the WIO Region. The indicators would also facilitate baseline assessment of key coastal ecosystems to generate new data and information. Currently there are no standard WIO regional indicators for monitoring the state of the coastal and marine ecosystems. Each of the participating countries in the region uses different set of indicators that may not necessarily be comparable at regional level. Regional indicators will allow mandated institutions in the WIO region to carry out monitoring activities whose findings can be compared at regionaland global levels. The Output will also involve implementation of baseline assessment studies targeting priority coastal and marine ecosystems in the region. Under this output, participating institutions will also review and develop modalities for monitoring the state of coastal and marine ecosystems and their functions in at least 3 participating countries. The participating countries will be engaged in a process of establishing ways of sustaining coastal and marine ecosystem monitoring programmes through consolidation of national effort and involvement of users of monitoring data and information. The indicators are used for monitoring the effectiveness of interventions by the countries and regional/international organisations in support of the SAP implementation. The data and information system should be clearly linked with the Nairobi Convention Clearing House mechanism.

Somalia was not involved in the implementation of the WIO-LaB project because of the political instability and insecurity in the country and for the same reasons was not involved in the PIF preparation also. In recognition of the recent positive developments in the political and security situation, the Validation meeting held in Nairobi, Kenya in November 2014, it was recommended that Somalia be included in the WIO-SAP implementation and few strategic assessment type activities aiming at providing baseline information on the status of coastal and marine environment of the country be included in the WIO-SAP proposal. Such information will assist the country and the programme to identify priorities for action.

Activity: A.2.4.1. Development of key indicators for assessing management effectiveness and monitoring of the state of critical habitats at regional and national levels and link to the State of the Coasts reporting process.

The process proposed for the delivery of activities is as follows:

- Engage an international consultant to work jointly with national experts and PADH Task Force, to develop regional indicators and the protocol for the assessment and monitoring the state of the coastal and marine ecosystems.
- Provide support to participating countries to establish national PADH working groups with experts drawn from appropriate national institutions to review and adapt the regionally agreed indicators and protocol for monitoring the state of coastal and marine ecosystems.
- Engage regional experts to work jointly with national experts to assess the effectiveness of various management interventions in selected transboundary coastal ecosystems using regionally agreed indicators.
- Provide support to countries to prepare State of the Coast reports based on the findings of studies on the assessment of management effectiveness, including also the results of monitoring of the state of coastal and marine ecosystems.
- Provide support to Somalia to compile information on up-to-date status of its coastal and marine ecosystems and their resources.

Activity: A.2.4.2. Establish national modalities for monitoring the state of critical marine and coastal habitats.

The process proposed for the delivery of activities is as follows:

- Engage an international expert to work jointly with national experts to determine the existing modalities for the monitoring of the coastal and marine ecosystems, including challenges faced by the participating countries in implementing monitoring activities.
- The international expert to analyse the existing arrangements and recommend alternative modalities for sustainable implementation of monitoring programmes taking into consideration unique situation of each of the participating countries.
- Provide support to participating countries to apply new modalities for sustainable monitoring of coastal and marine ecosystem in selected coastal areas.
- Provide support to participating countries to share experiences and lessons, at regional level, and disseminate information on sustainable financing of coastal monitoring to policy makers.

COMPONENT B: IMPROVED WATER QUALITY

GEF Funding: US$ 2,310,000 **Co-financing: US$ 16,385,000**

OUTCOME B.1: Quality of coastal receiving waters improved through pilot interventions

OUTPUT B.1.1: Cost-effective technologies for municipal wastewater treatment demonstrated in at least three (3) sites;

Output Descriptions: The primary goal of this Output is the reduction of stress to the coastal and marine ecosystem through adoption of innovative, appropriate and cost-effective technologies for the treatment of municipal wastewater in at least three (3) sites identified in target participating countries. In most countries in the WIO Region, management of municipal wastewater is a major challenge that need to be addressed as per the requirments of the participating countries as elaborated in the WIOSAP[37]. This output envisages review of innovative and cost effective technologies for the treatment and recycle/reuse of wastewater and adaptation of the same to suit the existing local conditions. The WIOSAP envisages that in the medium to long term, wastewater treatment systems would be constructed in participating countries using appropriate technologies to ensure adequate treatment of all municipal effluents before they are discharged into the coastal waters including estuaries. As the construction of conventional wastewater treatment plants is a capital intensive activity requiring substantial injection of funds which this project will not provide, the project will promote the adoption of less expensive and environmental friendly technologies such as constructed wetlands (surface and sub-surface types), seepage management, ecological sanitation, among others. Improvement of water quality through the development of such systems will assist countries to meet the Post 2015 Sustainable Development Goals (SDGs): Ensure availability and sustainable management of water and sanitation for all (Goal 6); Make cities and human settlements inclusive, safe, resilient and sustainable (Goal 11) and Conserve and sustainably use the oceans, seas and marine resources for sustainable development (Goal 14). The focus of such interventions will in first instance be on the hot spots of pollution as identified by participating countries in the WIO-LaB TDA. Improved water quality, including reduction in the level of suspended solids, also requires better land use management and in particular soil erosion control in river basins. This issue is addressed in component 3, which deals with managing river flows and sediment loads. While the project focuses on 'low-investment' wastewater treatment, where the opportunity presents to catalyse preparation of investments in larger municipal wastewater treatment, the project will support such initiatives.

[37] UNEP (2010d): Municipal Wastewater Management in the Western Indian Ocean Region: An Overview Assessment. Compiled by Sixtus Kayombo and Karoli N. Njau. United Nations Environment Programme/WIO-LaB Project Report, Nairobi, Kenya, 81pp.

Activity: B.1.1.1 Identification and implementation of wastewater management in-country interventions in at least three (3) priority sites in association with local stakeholders.

The process proposed described in Appendix 25 will be used to select the priority sites and the project will also:

- Provide financial support to national institutions/local government authorities to work jointly with community-based organisations and other partners, to implement pilot wastewater management demonstration project in target hotspot sites and compile lessons and best practices.
- Provide support to national institutions to work with stakeholders to disseminate information, lessons learnt, best practices based on the results of wastewater management in-country interventions implemented in target hotspot sites.
- Provide support to national institutions to establish water quality monitoring programmes in selected hotspot sites to determine the effectiveness of pilot wastewater treatment projects also to contribute to the LBSA Protocol under the Nairobi Convention. This will be implemented together with B.2.2.1.
- Engage consultants to work with national institutions/local authorities in target participating countries to develop fundable capital project proposals for the development of municipal wastewater treatment/management facilities in coastal cities to ensure adequate treatment of municipal wastewaters on long-term basis.

OUTPUT B.1.2.: Effluents at a minimum of three (3) demonstration sites are collected, treated, recycled and/or disposed of in accordance with international best practices

Output Descriptions: The primary aim of this Output is the treatment of effluents emanating from land-based sources and activities in selected coastal areas. Special attention will be given to effluents in key hotspot sites in target participating countries. This is considered important in view of that fact that increasing levels of pollution resulting from discharge of untreated effluents into the inshore waters of the WIO Region, are threatening human health and the integrity of the coastal and marine ecosystems. Human contact with contaminated waters is leading to increasing cases of diseases which are consequently reducing the productivity of coastal communities. This is in turn increasing poverty since more resources are channelled to addressing health challenges associated with the degradation of the environment. Waters polluted by effluents also result in contamination of fish and other marine products thus threatening public health including export markets for fish and other marine-related products. Pollution is also affecting the sustainability of coastal and marine ecosystems thus limiting goods and services that can be derived from them. These threats can be managed by preventing generation of effluents from various sources and also ensuring that all industrial and domestic effluents are collected and treated to acceptable standards before discharge into the coastal and marine waters. In most countries in the WIO region, the effluent control or treatment regulations are largely ineffective or are poorly applied. Under this Output, it is envisaged that sites and technologies for effluent treatment will be selected with community participation and countries will implement pilot in-country interventions on effluent treatment using inexpensive technologies such as constructed wetlands and algal ponding systems. The project would also demonstrate wastewater recycling approaches. Some of the technologies already tested in Africa will be used, such as urine diversion, struvite management. Mechanisms of building the capacity for sustaining such systems would also be explored (B.1.3).

Activity: B.1.2.1. Selection and implementation of effluent reduction measures in at least one (1) priority site in accordance with the international best practices and monitoring of compliance, effectiveness and sustainability.

The priority site will be selected based on the process proposed described in Appendix 25. The project will also:

- Provide support to appropriate national institutions/local authorities with appropriate mandate to implement effluent reduction measures that are cost-effective, efficient and sustainable, in selected sites in target countries.
- Select and engage communities, municipalities, industries, hotels, schools, prisons, hospitals or other community institutions, in the implementation of strategies for reducing generation of effluents in their premises.
- Select and engage specific industries and other stakeholders in the implementation of effluent strategies in selected hotspot sites based on the assessment of the main sources of effluents in targeted hotspot sites.
- Work jointly with municipal authorities, including other regulatory authorities to build capacity for the enforcement of wastewater management regulations, including implementation of polluter and user pays principles.
- Provide support to appropriate national institutions in target countries to establish and implement national water quality monitoring programmes to determine the effectiveness and sustainability of effluent reduction measures adopted by stakeholders in selected hotspot sites.

OUTPUT B.1.3: Pilot actions undertaken to build capacity for water quality management and ICM promoted through empowerment of communities and other actors at the demonstration sites.

Output Descriptions: The aim of this Output is to enhance institutional and/or community participation in water quality management/water pollution control activities in participating countries focussing on key hotspot sites. Also, the output will enhance the implementation of ICM through the empowerment of local communities and other actors in sites where wastewater/effluent treatment demonstration project would be implemented. The capacity for the wastewater management and ICM in the WIO region is limited and this has been made even worse by lack of community participation. There are also constraints due to poor awareness among local communities on issues related to water quality management and ICM. Participation of local communities and other key stakeholders is considered important for reducing stress to the coastal and marine ecosystems. The successful implementation of ICM including wastewater management strategies depends on the goodwill of local communities and many other actors at the policy and implementation levels such as governments, NGOs, private sector, local authorities and various ministries that have mandate related to pollution control and environmental management. Through the National Focal Points and national mechanisms, the project would provide support to countries to coordinate relevant ministries (such as those of the environment, water, local and regional authorities, industry, lands, agriculture, etc.), National Bureaus of Standards, the private sector, NGOs, community-based organisations and engage the media in the implementation of the vision of a pollution-free coastal environment.

Activity: B.1.3.1. Initiate programmes and actions that empower communities on water quality management in at least four (4) countries.

The four (4) countries will be selected according to criteria to be developed. Further, the project will also:

- Support to participating countries to engage universities to carry out community empowerment needs assessment and developmentnational plans for engagement of communities in water quality management issues.
- Engage national NGOs/CBOs in the implementation of pilot in-country interventions for wastewater management.
- Engage national NGOs/CBOs to mobilise local communities in the monitoring of the effectivess of wastewater/effluent treatment systems including monitoring of compliance of industries in target hotspot sites.
- Engage national NGOs/CBOs to build the capacity of local communities to advocate for effective wastewater management in local government authorities/councils.

- Provide technical and financial support to participating countries to develop and implement wastewater management stakeholder's involvement plans for selected hotspot sites.

OUTCOME B.2 Regulatory framework for monitoring and management of pollutant loads, effluents and receiving water quality implemented/adopted at regional level

OUTPUT B.2.1: Regionally harmonized framework for monitoring pollution loads and water quality standards developed for receiving coastal waters.

Output Descriptions: The primary aim of this output is the development and implementation of a regionally harmonised water pollution monitoring programme using regionally agreed indicators and monitoring protocol. The output also envisages development of receiving water quality standards that would be used as a basis for monitoring the extent of water pollution and industry compliance to wastewater management regulations. Most countries in the WIO region do not have long-term water quality monitoring programmes, in part due to limited capacity and also due to lack of appreciation among the policy makers of the importance of protecting coastal and marine ecosystems from land-based sources of pollution. Most of the coastal and marine monitoring works are usually sporadic, short-term and largely unsustainable. Also, most countries in the region have not enacted necessary water quality standards or have standards that do not meet international norms. There are no receiving water standards for the marine waters in the region. In countries that have developed wastewater standards, the same are usually ineffetive due to limited capacity for enforcement. Raw and in some instances, semi treated effluent discharges constitute the main sources of pollution of rivers, ground waters and inshore waters in most of the participating countries. To control the pollution of coastal waters by wastewaters/effluents, receiving water standards need to be developed. There is also a need for harmonised monitoring framework within the WIO Region in order to ensure that institutions in participating countries implement their pollution monitoring programmes using regionally agreed methodologies and indicators so that results can be compared across the region.

Activities: B.2.1.1. Review existing standards, regulations and processes at national levels and develop regional standards and guidelines for effective wastewater and effluent monitoring and control in accordance with best practices (Linked to B 2.3.1).

The process proposed for the delivery of activities is as follows:

- The project will engage national experts in appropriate national institutions to work jointly with national Water and Sediment Quality (WSQ) working groups to review the existing water quality standards, regulations and processes at national level and provide recommendations for their improvement.
- The project will engage a regional consultant to work jointly with WSQ working group and national experts to develop regional standards and guidelines for effective wastewater and effluent monitoring across the region.
- The project will provide support to participating countries to update national standards and also implement regional standards and guidelines including integration of the same into appropriate national policies, strategies, plans or legislation.

OUTPUT B.2.2: Regionally harmonized standards and monitoring framework for pollutant loads and effluent and marine water quality standards adopted by at leastthree (3) countries through participatory national and regional consultations.

Output Descriptions: The primary aim of this Output is the adoption of regionally harmonised effluent and marine water quality standards and establishment of pollutant loads monitoring framework in at least three (3) countries in the WIO Region. This would be done through appropriate national and regional consultative processes. In the WIO Region, marine water quality standards,

particularly in countries that have formulated them, do not often meet international norms and/or are poorly enforced due to limited capacity in participating countries. Furthermore, most of the countries have different sets of effluent and water quality standards and there are no harmonised regional effluent and marine water quality standards. Concerted effort for the protection of the coastal and marine environment in the WIO region required harmonisation of effluent and water quality standards including the establishment of a sustainable water pollution monitoring frameworks[38] at regional and national levels. Thus, this output envisages development of a regional monitoring framework that allows for progressive application of regional effluent and marine water quality standards by at least three (3) countries in the region. To reduce the pollution of coastal waters by effluents and raw sewage from urban areas, standards must be developed, harmonised and enforced in participating countries to ensure that discharge of effluents does not compromise the integrity of the coastal and marine ecosystems that are largely transboundary in nature.

Activity: B.2.2.1 Development and implementation of water quality monitoring framework in at least three (3) countries.

The process proposed for the delivery of this activity is as described in Appendix 25. The project will also:

- Engage appropriate national institutions in at least three (3) participating countries to implement the regional water quality monitoring programme in selected hotspot sites.
- Provide support to participating countries to establish national WSQ working groups to create awareness compile lessons and disseminate results of the national monitoring programme.
- Provide technical and financial support to appropriate national institutions to explore modalities of integrating the national water quality monitoring programmes into existing national environmental monitoring and reporting processes.

OUTPUT B.2.3: Regulatory and human capacity of national and regional facilities/institutions strengthened to promote implementation of water quality monitoring using regional standards.

Output Descriptions: The primary aim of this output is to strengthen the regulatory and human capacity of national and regional institutions in order to ensure pollution loads monitoring programmes are implemented sustainably according to harmonisd regional effluent and receiving water quality standards. This is important in that pollution control and management of effluents in the WIO region has in the past been constrained by lack of institutional and human capacity, not only for the development of water quality standards, but also for enforcement of the same. In countries that have already developed effluent and marine water quality standards, the major limitation has been weak enforcement due to lack of institutional and human capacity for implementation. In addition, most countries do not have sustainable pollution loads monitoring programmes and in few countries that have them, the capacity for implementation is often very weak and unsustainable. Also, most of the modalities for sustainanable financing of water quality monitoring programmes at national level have not been assessed, developed or taken advantage of. It is envisaged that the capacity in participating institutions will be built through workshops on the minimum/desirable water quality standards, including training on the implementation of regulatory, monitoring and financing modalities. The capacity building training will be undertaken in at least three (3) countries in the WIO region. It is expected that improved institutional and human capacity will contribute to improved water quality, and ultimately to the long-term sustainability of the coastal and marine ecosystems in the WIO region.

[38]IAEA-MESL (2005): An Assessment of the National Capabilities for Marine Pollution Monitoring in the Western Indian Ocean Region and Recommendations for Regional Capacity Building and Training Needs. Compiled by J. deMora. WIO-LaB Project Report, 20p.

Activity: B.2.3.1 Build capacity of countries to implement regional standards and ensure effective processes of monitoring and controlling wastewater and effluent discharges.

The process proposed for the delivery of activities is as follows:

- The project will engage an international consultant to carry out a capacity building needs assessment and develop and implement tailor-made training programmes aimed at ensuring that target countries have effective process for monitoring and controlling wastewater/effluent discharges.
- The project with the support of an international consultant, conduct training workshops in at least three (3) countries to ensure that the target countries have effective process for monitoring and controlling wastewater/effluent discharges.
- The project in collaboration with IAEA-MEL, provide financial andtechnical support to appropriate national institutions in target countries to build capacity for implementing regional standards including monitoring and controlling wastewater/effluent discharges.

COMPONENT C: SUSTAINABLE MANAGEMENT OF RIVER FLOWS

GEF Funding: US$ 1,175,000 **Co-financing: US$ 16,999,941**

OUTCOME C.1: Environmental Flow Assessments (EFAs) underpin the integrated management of river flows and coastal areas and implementation of assessment recommendations strengthens ecosystem resilience.

OUTPUT C.1.1: Environmental flow assessments conducted in at least two (2) pilot riverbasins to determine the environmental, economic and social trade-offs in water allocation and the need for management of river flows with respect to coastal areas.

Output Descriptions: The WIO Region has a number of important river basins whose runoff drain to the coast through estuaries and deltas. In many instances, poor management of river basins has resulted into changes to river flows, degradation of water quality and changes in sediment loads[39]. These hydrologic alterations are now impacting the critical coastal and marine ecosystems leading to reduction in ecosystem goods and services that support the livelihoods of coastal communities including also national economies. Integrated Water Resources Management (IWRM) approach which some of the countries in the WIO Region have adopted through reforms in their water sectors, adopts a holistic approach to the management of water resources. However, capacity for IWRM implementation in most of the participating countries has been limited by lack of appropriate decision-making tools for allocating water to various users including water allocation (environmental flows) for sustaining ecological systems that includes coastal and marine ecosystems. To remedy deficiencies in the management of river basins, the SAP proposes to focus on building capacity for Environmental Flow Assessment (EFA) and implementation in the region. EFA is an important decision support tool for the management of river flows in view of the fact that it provides a scientific process of allocating water for various purposes. The EFA has certain fundamental benefits in that it allows for informed allocation of river water resources while at the same time allowing adequate volume of river flow to reach the downstream areas where it is required to maintain aquatic and terrestrial ecosystems. The application of EFA is still underdeveloped in most countries in the WIO Region, with the exception of the South Africa, which developed the concept and Tanzania and Kenya where it has been applied in some river basins. In this regard, awareness on the value of EFA

[39] UNEP/Nairobi Convention Secretariat (2010): An assessment of hydrological and land use characteristics affecting river-coast interactions in the Western Indian Ocean region. Compiled by Anton Earle, Daniel Malzbender, Emmanuel Manzungu and Palesa Mokorosi-African Centre for Water Research, WIO-LaB Project, Nairobi, Kenya, 46p.

needs to be created and capacity for EFA implementation developed. Also, to ensure that EFAs take coastal and marine management into account effectively, institutional linkages between national river basin management and coastal water management organizations need to be established within the auspices of the Nairobi Convention. The ultimate aim is to ensure that river basin and coastal zone management strategies are holistic and fully integrated at all levels.

The focus of the interventions under this component would in first instance be on the most affected river basins in the WIO region, as identified in the TDA and presented in the WIO-LaB SAP. Consideration would be given to the specific situation in Small Island Development States (Seychelles, Comoros and Mauritius), where water resources management have a much different (in light of the smaller size of rivers) but equally crucial importance.

The primary aim of the output is the achievement of the WIOSAP Environmental Quality Objective *"River flows in the WIO Region are wisely and sustainably managed.* Realisation of this environmental quality objective will mean healthy, functioning rivers, assuring the inhabitants of the WIO Region of continued clean water and flourishing coastal ecosystems delivering essential goods and services including global environmental benefits. It is envisaged that this activity will be undertaken jointly with IUCN. South Africa, Kenya, Tanzania and Mozambique are the four countries that were engaged by IUCN at the invitation of UNEP to facilitate the development of a programme component on Environmental Flows management, as detailed in this component. The project has integrated the requirements of these countries in specific activities described in the following sections.

Further, the Validation Meeting held in November 2014 in Nairobi, Kenya recommended that since Somalia was not involved in the WIO-LaB project or in the IUCN-coordinated rapid national assessment of environmental flow management in 2012 that was conducted in Kenya, Mozambique, South Africa and Tanzania, a rapid national assessment of environmental flow management be conducted in Somalia during the WIO-SAP implementation.

For the purpose of ensuring goals and targets under this component are achieved, Regional EFA working group will be established by the project. This group will consist of national experts, project staff and representatives from water basin authorities. The group, amongst others will provide a platform for exchange of information and experience and for overseeing the implementation of the planned activities under this component.

Activity: C.1.1.1 Using participatory approaches identify and support the conducting of comprehensive Environmental flow assessments (EFAs) in two selected river basins.

The process proposed for selection of the two river basins is described in Appendix 25 and the selected project will also:

- Provide support to appropriate national institutions to engage national experts to conduct EFA studies in selected in river basins using standard regional EFA guidelines and or methodologies.
- Provide support to target countries to compile lessons, create awareness and desiminate the results of EFA studies implemented in specific river basins.
- For Somalia, a rapid national assessment of environmental flow management will be conducted and will focus also on identification of barriers to implementation and required solutions to deliver effective river basin management. More detailed assessment will be conducted for river Juba-Shebele.

OUTPUT C.1.2: Implementation of flow assessment recommendations and participatory river basin management approaches yield environmental, economic and/or social benefits as a result of improved river flows to the coast.

Output Descriptions:The primary aim of this output is implementation of flow assessment recommendations and promotion of participatory river basin management approaches in at least two (2) river basins in target participating countries. The environmental flow assessment (EFA) is considered to be an important tool for river basin management since it allows for integration of freshwater and coastal zone management policies, plans and institutions, and ultimately leads to an improvement in river water abstraction management and contributes in sustaining the ecosystem functioning at the river-coast interface. There is limited capacity for environmental flow assessment in most of the participating countries, with the exception of South Africa. Also, in most of the participating countries, the allocation of water resources is done with little regard for downstream ecosystems. Also, the participation of key river basin stakeholders in river basin management is often limited although there has been some recent improvements following implementation of reforms in the water sector in some of the countries. The project would thus attempt to address some of the major capacity constraints in key national institutions charged with the mandate of river basin management. The WIOSAP project proposes to work with relevant river basin authorities in target countries such as Tana and Athi Rivers Development Authority (TARDA) in Kenya, Pangani Basin Water Office (PBWO) and Rufiji River Basin Development Authority (RUBADA) in Tanzania, Inkomati Catchment Management Agency (ICMA) in Mozambique, Komati Basin Water Authority (KOBWA) and Breede/Overberg Catchment Management Agency (BOCMA) in South Africa. These authorities will also be represented in a regional EFA working group to be established by the project.

Activity: C.1.2.1 Development and implementation of environmental flow management plans in at least two (2) sub-basins, taking into account the social, environmental and economic trade-offs and the political decisions and change management mechanisms required.

Appendix 25 describes the proposed process for selecting the 2 sub-basins and the project will also:

- Provide support to appropriate river basin authorities in target countries in the region to implement environmental flow management plans through a participatory process involving all key actors.
- Provide support to participating countries to compile lessons, create awareness and disseminate information on the implementation of environmental flow management plans in target river basins.
- Organise regional workshop to bring together representative of river basin organisations and other actors to exchange experiences and share lessons in the implementation of environmental flow management plans in targeted river basins.

OUTCOME C.2 Capacity to conjunctively manage river flows and coastal areas strengthened.

OUTPUT C.2.1: Institutional arrangements for implementation of climate sensitive environmental flow assessments developed, taking into consideration the environmental flow into the coastal areas and estuaries.

The primary aim of this output is to enhance institutional capacity for environmental flow assessment (EFA) in the WIO region and build institutional capacity and made institutional arrangements for conjunctive management of river basins and associated coastal areas. EFA is an internationally accepted tool for determining water flow required to maintain riverine and coastal ecosystems and their benefits. EFA helps river basin managers to find the optimal balance among competing water uses. However, there is limited knowledge on EFA in the WIO Region. In most countries in the region, the capacity for undertaking and implementing EFA is limited as there are few experts in the region who are conversant with the EFA methodologies. In adition, only few river basin authorities have capacity to undertake EFAs and this capacity is mainly concentrated in South Africa. There is therefore a need to develop the capacity in key institutions in target countries so that they are able to

undertake EFA and integrate EFA into appropriate planning processes, through transparent and consultative process.

EFAs will be incorporated into relevant water management plans, programmes and policies. During this process, practice and lessons on integration of EFA will be shared through exchange visits, secondments, etc. The project would in particular promote linkages between EFA experts in South Africa and those in other target countries in order to allow officials from other countries benefit from South African experience. Linkages with existing networks of EFA practitioners and information centres (e.g. www.indaba.iucn.org) will also be established. A deliberate attempt will also be made to share experiences, lessons and best practices and create awareness among policy makers on the importance of EFA.

Further under this sub-component, a proposal will be drawn to develop an institutional framework for a selected river basin and associated coastal areas, so that river basin management capacity is set up also considering the needs for coastal area management, based on the hydrological, geochemical and socio-economic linkages between the river basins and coastal areas. Local or national linkages between river basin management and coastal water management organizations are needed. The purpose of such linkages will be to ensure that current policies, legal and institutional gaps/overlaps are identified and adjustments made as necessary. Forums for inter-sectoral discussion, cooperation and joint planning (at ministerial as well as stakeholder level) need to be established, to define common objectives and streamline management responsibilities between freshwater and coastal management organisations.

Activity: C.2.1.1 Preparation of regional guidelines on EFA and building of regional and national capacity to undertake and update environmental flow assessments (EFAs).

The process proposed for the delivery of activities is as follows:

- The project would establish a regional EFA working group to work with the international and national experts in the process of developing EFA regional guidelines, and explore modalities of their adoption in participating countries.
- The project will engage an international consultant to work jointly with national experts and develop regional EFA guidelines and or methodologies. The guidelines will be approved by the regional EFA working group.
- The project with the support of an international EFA consultant, organise regional training workshops for building the capacity for environmental flow assessment (EFA) in key institutions in the WIO region.
- The project will provide support to target countries to establish national technical working groups for adapting and updating EFA regional guidelines and or methodologies.
- The project will provide support to appropriate institutions in target countries to ensure regional EFA guidelines/methodologies are applied in EFA studies that will be undertaken in specific river basins in target countries.
- The project will organise study tours for policy makers, river basin and coastal zone managers in specific river basins to familiarise them with the applications of EFA in IWRM and ICZM.

Activity: C.2.1.2. Pilot development of an institutional and regulatory framework for conjunctive management of river basins and coastal areas in at least one (1) priority site.

The selection process will be guided by the process described in Appendix 25 and the project will also:

- Support of an international EFA consultant, organise regional workshops for building the capacity for a conjunctive management of river basins, coastal aquifers and coastal areas.

- Involve a wide range of stakeholders both in the river basin management and coastal zone management. The above mentioned workshops will function as the platform for these stakeholders to have dialogues on the possible and suggested conjunctive managmeent of river basins and coastal areas.

COMPONENT D: GOVERNANCE AND REGIONAL COLLABORATION

GEF Funding: US$ 3,894,000 **Co-financing: US$ 3,969,000**

OUTCOME D.1 Updated policies and strong institutions underpin WIO-SAP implementation

OUTPUT D.1.1: ICZM protocol developed and adopted at the regional level

Output Descriptions: The primary aim of this Output is the finalisation for adoption of an ICZM Protocol for the Nairobi Convention. A crucial need in the WIO Region is integrated governance of the coastal and marine environment. Coastal zone users involve a range of economic sectors such as fishing and aquaculture, agriculture and forestry, tourism, mining, industry, transportation, energy production and urban development. Some of the sectors are not compatible and hence the need for coordinated inter-sectoral management. Crosscutting governance instruments that are essential for effective management of the coastal zone include integrated coastal zone management (ICZM). In order to enhance the application of ICZM Principles in coastal planning processes in the region, the WIOSAP will finalise the regional ICZM Protocol for the Nairobi Convention that was initiated with the support of the EU-IOC/COI RECOMAP Project.

Activity: D.1.1.1 Finalization of the ICZM protocol and provision of support to participating countries to ratify the protocol at national level.

The process proposed for the delivery of activities is as follows:

- The project would provide technical and financial support to participating countries to engage national legal and technical task force to review the draft ICZM Protocol and provide recommendations.
- The project would provide technical and financial support to Nairobi Convention to hold national consultative meetings to consider the draft ICZM Protocol produced by the Legal and Technical Review Task Force upon incorporation of the national recommendations.
- The project would provide support to Nairobi Convention Secretariat to organise a meeting of plenipotentiaries to develop final text of the ICZM Protocol and recommend for its adoption.
- The project would provide support to Nairobi Convention to organize for the final adoption of the ICZM Protocol by the Conference of Plenipotentiaries (COP).

Activity: D.1.1.2. Build capacity in participating countries for the implementation of the ICZM protocol (Linked to A 1.4.1).

The process proposed for the delivery of activities is as follows:

- Engage national consultants to work jointly with the national Legal and Technical Review Task Forces to determine the national capacity needs for the implementation of ICZM Protocol.
- Engage appropriate regional institutions to organise a regional stakeholders training workshop on the implementation of the ICZM Protocol at national level. The workshop to bring onboard key stakeholders at national and regional levels.
- The project would provide financial support to participating countries to establish modalities for the integration of the requirements of the ICZM Protocol into the existing coastal planning and management mechanisms.

- Provide support to countries to create awareness on the ICZM among policy makers and key actors at national level.

OUTPUT D.1.2: LBSA protocol ratified in at least four (4) countries and supported in all countries through the development of policy briefs, model legislation and capacity building to practitioners.

Output Descriptions: The primary aim of this output is to facilitate ratification of the LBSA protocol in at least four (4) countries in the WIO Region. The output also ams at providing support to all participating countries through development of policy briefs, model legislation and capacity building to practitioners. LBSA Protocol was one of the key deliverables of the WIO-LaB Project that was adopted by the participating countries in a Conference of Plenipotentaries that was held in 2010[40]. The protocol is yet to be ratified by the participating countries. WIOSAP project will create the momentum for the ratification of the LBSA Protocol as well as establishment of the mechanisms for its implementation in target participating countries. The ratification of the LBSA protocol is considered important because lack of effective governance is regarded as one of the main barriers limiting the conservation of coastal and marine environment in the WIO Region. Weak governance curtails implementation of national responses to transboundary problems affecting coastal and marine environment[41]. The SAP proposes that over the next five years, a key priority will be improving capacity for Ecosystem-Based Management (EBM), and ensuring that, throughout the WIO region, appropriate legal and regulatory frameworks for LBSA management are put in place and implemented at national and regional level. Countries in the WIO Region would thus be supported to ratify and domesticate the LBSA Protocol, as part of their obligations to further the implementation of the GPA and also to deal with priority LBSA issues that are considered to be of great significance at both national and regional levels. The SAP also proposes that regional action be taken to review, update and harmonize the regional legal framework relevant to LBSA in line with multilateral environmental agreements. This review will be undertaken in consultation with key stakeholders, including relevant inter-governmental organizations. A basis for this review would be provided by the LBSA Protocol in addition to the Nairobi Convention.

Activity: D.1.2.1. Support country processes for ratification of the LBSA protocol.

The process proposed for the delivery of activities is as follows:

- The project will engage national experts in the development of policy briefs on specific and current LBSA issues in the region and present the same to LBSA practitioners/policy makers in participating countries, through national forums that would be organised ny the Nairobi Convention National Focal Points.
- The project will engage national legal experts in appropriate institutions in participating countries, to work with the national legal task force to develop model legislation for key LBSA issues and provide strategies for adoption of the same by established national governance mechanisms including parliamentary processes in participating countries.
- The project will work with the Nairobi Convention Secretariat and an appropriate regional institution to organise a regional workshop for members of appropriate parliamentary committees and policy makers in participating countries tocreate awareness and educate them on the importance of LBSA Protocol and its domestication through integration into existing legislation or through formulation of new legislation.

[40] UNEP/Nairobi Convention Secretariat (2010): Report of the Conference of Plenipotentiaries and the sixth meeting of the Contracting Parties to the Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region. Nairobi, 29 March–1 April 2010.
[41] UNEP/Nairobi Convention Secretariat (2010): Regional synthesis report on the review of the policy, legal and institutional frameworks in the Western Indian Ocean (WIO) region, UNEP/WIO-LaB Project Report, Nairobi Kenya, 104p

Activity: D.1.2.2. Build capacity in participating countries to implement the LBSA protocol.

The process proposed for the delivery of activities is as follows:

- The project will work with the National Focal Points to identify chalenges in the implementation of the LBSA Protocol in participating.
- The project will provide support to National Focal Points to create awareness on the LBSA protocol to policy makers in participating countries, through national forums that would be organised by the Nairobi Convention National Focal Points.

OUTPUT D.1.3: Implementation of the WIO-SAP succeeds at national level through the coordination and guidance of interministerial committees and regional task forces.

Output Descriptions: Establishment of effective project coordination structures at national level is considered a key factor for the successful implementation of the project and in particular in the delivery of project outputs and realisation of long-term outcomes at country level, as defined in the WIOSAP. It is also important in ensuring country ownership and consolidation of the commitment of the participating countries to the delivery of anticipated project outputs and outcomes.The primary aim of this output is thus to ensure successful implementation of the WIO-SAP project at national level through using existing national coordination mechanism and inter-ministerial committees and where they do not exist facilitate their establishment. The project will thus liase with the Nairobi Convention Secretariat to work through existing processes and structures (such as national inter-ministry committees) where these exist which can provide policy guidance through the Project Steering Committee to the project management. Facilitation of these processes and structures where they are requested and appropriate, will be provided. The output also aims at strengthening the regional task forces established within the framework of the Nairobi Convention and which proved invaluable in the implementation of the WIO-LaB Project. The project would specifically strengthen the Legal and Technical Review Task Force with respect to activities focussed on the finalisation of the ICZM Protocol and ratification of the LBSA Protocol, including also strengthening of policy, legal and institutional frameworks for addressing LBSA issues in the region. The Physical Alteration and Destruction of Habitats (PADH) Task Force would also be strengthened with regard to the implementation of component A activities which are focussed on critical coastal and marine habitats. The PADH Task Force would be expanded to bring onboard economic valuation experts so that it can also play a critical role in activities focussed on economic valuation of coastal and marine natural resources. The Municipal Wastewater Management (MWM) Task Force and Water and Sediment Quality (WSQ) Working Group would also be strengthened to play a key role in the implementation of component B activities that are focussed on pollution monitioring, development of standards, municipal wastewater management, among others. The project would establish an Environmental Flow Assessment (EFA) Working Group as this is considered essential in the implementation of activities focussed in facilitating exchange of information and on building capacity for environmental flow assessment in the region. Other regional task forces or regional working groups would be established as it may become necessary. This output also envisages the establishment and operationalisation of the regional WIOSAP project management unit including also the establishment of national project offices in participating countries.

Activities: D.1.3.1. Provision of support to participating countries to monitor WIO-SAP project implementation and also monitor the state of the marine and coastal environment.

The process proposed for the delivery of activities is as follows:

- The Nairobi Convention Secretariat (NCS) will establish a regional Project Management Unit (PMU) at the Nairobi Convention Secretariat and recruit the following project staff: Project Manager, Project Technical Officer/Scientist and an Administrative Assistant.

- The WIOSAP PMU will develop Terms of Reference for the national and regional Task Forces and the Inter-Ministerial Committee and jointly with NCS operationalise them. These TORs will take into consideration the existing structures and processes in order to avoid duplication.
- Provide support to the National Focal Points in participating countries to establish national WIOSAP Project coordination offices including operationalisation of national Task Forces/Working Groups including also the inter-ministerial coordination committees for implementation of project activities at national level.
- The national WIOSAP project coordination offices will compile data and information derived from various assessment studies that will be undertaken by the project, such as ecosystem vulnerability assessment, pollution monitoring, environmental flow assessment, economic valuation of coastal and marine ecosystems, etc, and ensure new information is used in the preparation of the national state of the coast reports as per the requirements of the existing national environmental legislation. These reports will contribute in the preparation of the regional reports on the state of the coastal and marine environment that will be coordinated by the Nairobi Convention Secretariat.

Activity D.1.3.2. Presentation of regular and timely briefings on the WIO-SAP Project to national inter-ministery coordination committees, ocean policy task forces, water management authorities and other national environmental and marine policy bodies.

The process proposed for the delivery of activities is as follows:

- The project would engage a regional communication expert to work jointly with various thematic experts and task forces and prepare a regional communication strategy for the WIOSAP project.
- The project would provide technical and financial support to participating countries to compile lessons and experiences in the implementation of various activities of the project at national level.
- The project would provide support to participating countrues to engage national experts to prepare regular briefs on various key coastal and marine issues dealt by the project and present the same to national inter-ministerial environmental coordination committees, ocean policy task forces, water management authorities and other national environmental and marine policy bodies, as it may be appropriate.

OUTPUT D.1.4: Establishment of a funding pipeline to support long-term implementation of the SAP through Nairobi Convention including coordination of stakeholders and facilitation of learning and exchange in support of WIOSAP project implementation.

Output Descriptions: The primary aim of this output is the establishment of knowledge management systems and exchange mechanisms and support governance and awareness creation with respect to the WIOSAP project. Thus, the GEF intervention through the WIOSAP Project should be seen as providing catalytic funding to the Nairobi Convention and its partners to catalyse action in participating countries and therefore build confidence and commitment of the governments to the transboundary issues identified in the TDA and SAP. This on a long-term basis will make the information exchange sustainable and robust and capable of implementing concrete actions on the ground. Knowledge management and sharing is regarded as one of the key constraints in the sustainable management of the coastal and marine ecosystems in the WIO Region. In most of the countries, the data and information management systems are constrained by the limited capacity, both technical and financial. The project will aim at improving the Nairobi Convention Clearing House Mechanism developed under the auspices of the WIO-LaB Project.It is envisaged that the new CHM will not only perform data and information archival and exchange services as it is the case now but more importantly will play a central role in production of the state of the coast reports from monitoring of ecosystems and water quality and the provision of information, knowledge, and "evidence" of the highest quality and suited to use by decision-makers at regional and national levels

as appropriate. The output also entails the establishment and operationalisation of WIO-SAP project implementation governance arrangements particularly the establishment of the Project Steering Committee and the Inter-Ministerial Coordination Committee, including also strengthening the implementation and coordination structures of the Nairobi Convention, particularly the technical working groups that will be convened by lead institutions from participating countries where specific project activities will be coordinated or implemented. It is envisaged that working groups will be established for PADH, WSQ, MWM, and EFA. The project would also strengthen the project implementation arrangements at national level by providing support to National Focal Points in participating countries to establish national project coordination offices and also constitute national Inter-Ministry Coordination Committees and Task Forces. The project will also participate in GEF international Waters Conferences and IW: LEARN processes to ensure exchange of lessons, experiences and best practices in project management and governance.

Activity: D.1.4.1. Develop capacity of the WIO-SAP project management, coordination of learning and exchange, resource mobilization and support for implementation of the regional legal frameworks, including the Nairobi Convention.

The process proposed for the delivery of activities is as follows:

- The Nairobi Convention Secretariat will establish WIOSAP Project Management Unit.
- The project will organize regional stakeholder's consultative workshops as a means of deciding on partnerships for implementation of priority SAP actions and sharing knowledge.
- The Project will establish linkages with relevant regional ministerial or senior government officials meetings and relevant meetings of the RECs
- WIOSAP PMU in collaboration with NCS, countries and partners will develop project pipelines to raise additional resources for implementation of the WIOSAP project.
- The project staff will participate in GEF international Waters Conferences and IW: LEARN processes to ensure exchange of lessons, experiences and best practices in project management and governance.

Activity: D.1.4.2. Strengthening the capacity of national structures including, the Nairobi Convention Focal Points to provide overseer the WIO-SAP project implementation.

The process proposed for the delivery of activities is as follows:

- WIO SAP PMU in collaboration with the NC Focal Points and National Focal Points Institutions will facilitate the establishment of a network of national inter-ministry committees to enhance inter-sectoral dialogues and cooperation.
- Provide support to National Focal Points to coordinate national-level activities and establish linkages with national inter-ministerial committees in participating countries.

Activity: D.1.4.3. Support the establishment and operationalisation of the regional coordination and implementation structures.

The process proposed for the delivery of activities is as follows:

- The WIOSAP PMU working in collaboration with the Nairobi Convention Secretariat will identify, establish and operationalise regional coordination and implementation structures for specific project activities. The structures to be established will include working groups and task forces for PADH, WSQ, MWM, and EFA.
- The project will provide financial support to working groups and task forces established for PADH, WSQ, MWM, and EFA to enable them coordinate and or implement agreed project activities and prepare timely reports.

- The project would work jointly with the Nairobi Convention Secretariat to establish modalities of integrating these structures, upon completion of the present project, into the formal structures of the Nairobi Convention in order to ensure long-term sustainability of the centres and also ensure predictability of their engagement in the work programme of the convention.

OUTCOME D.2: Improved knowledge management systems and exchange mechanisms support WIO management, governance and awareness creation

OUTPUT D.2.1: Existing Nairobi Convention Clearing House Mechanism expanded to incorporate information on national and regional investments and projects, climate variability and change, guidelines, methodologies and success stories, among others.

Output Descriptions: The primary aim of this output is to expand the existing Nairobi Convention Clearing House Mechanism (CHM) to incorporate data and information on national and regional investments and projects, climatic variability and change, guidelines, methodologies and success stories, among others, which will beused within the project framework. The Nairobi Convention Clearing House Mechanism was one of the key deliverables of the WIO-LaB Project. It is envisaged that under the WIOSAP project, the CHM will be re-invigorated and expanded to include more data and information that would be generated during the implementation of the project. This will include information and reports on spatial planning, economic valuation of coastal and marine ecosystems, reports on the state of the region's marine and coastal environment, reports on the assessment of vulnerability of coastal ecosystems to climate change, reports on strategies for extractive use of coastal and marine natural resources, reports on environmental flow assessment studies in target river basins, reports and lessons on the implementation of in-country interventions on wastewater treatment including those on the restoration of coastal and marine ecosystems in hotspot sites, and reports on water quality/pollution monitoring programmes. Also, the reports of the Steering Committee, Inter-Ministerial Committees and Regional Task Forces will be uploaded into the CHM since these usually contains useful lessons that can be shared across the region.The CHM will also be expanded to include technical manuals, methodologies and or guidelines for coastal spatial planning, environmental flow assessment, vulnerability assessment, economic valuation of coastal ecosystems, ICM implementation, marine water standards including enforcement mechanisms, among others. The CHM will also be expanded to include policy briefs covering key issues targeting policy makers and media in the region. The WIOSAP will also provide participating countries with financial and technical support to expand their national Clearing House Mechanisms and ensure that same are linked to Nairobi Convention Regional Clearing House Mechanism.

Activities: D.2.1.1. Improvement of the existing Nairobi Convention Clearing House Mechanism to facilitate access to priority policy and technical guidelines, reports, standards and success stories.

The process proposed for the delivery of activities is as follows:

- Engage a consultant to review the existing Nairobi Convention regional Clearing House Mechanism, and identify gaps and recommend areas that need to be expanded, including the possibility of integrating it with a GIS module.
- Provide support to the Nairobi Convention Secretariat to update the regional Clearing House Mechanism and upload data, project reports, policy briefs, lessons, guidelines, including technical manuals generated during the implementation of the WIOSAP Project, including also information on projects, public and private investments in the WIO Region.
- Provide support to the Nairobi Convention Secretariat to create more awareness on the regional Clearing House Mechanism and encourage governments in participating countries and other partners of the convention to make use of the facility as a platform for sharing and exchanging information.

- Engage a regional expert to work with the Nairobi Convention to organise training workshops to build the national capacity in Data and Information Management, Geographic Information Systems (GIS) and Remote-Sensing, including the use of established databases and GIS to improve coastal and marine environmental planning and management.
- Promote networking among IFIs, donors and stakeholders to facilitate information sharing and updating of their activities and on long-term basis leverage sustainable financing of the Clearing House Mechanism.
- Regular updated overview of the state of the project pipeline will be undertaken (Refer to D1).

Activity: D.2.1.2. Development of institutional and financial capacity for sustaining knowledge management and regional stakeholder's platforms and networks.

The process proposed for the delivery of activities is as follows:

- Engage a regional expert to carry out a regional review of the status of the national nodes of the Nairobi Convention Clearing House Mechanism and identify challenges faced by the participating countries and ways in which the WIOSAP project can address these challenges more appropriately.
- Engage an international consultant to advise the Nairobi Convention Secretariat on the strategies that can be pursued in order to develop institutional and financial capacity necessary for sustaining the Nairobi Convention Clearing House Mechanism including other knowledge management roles of the convention.
- The international consultant to also advise the Nairobi Convention Secretariat on the strategies of developing institutional and financial capacity for sustaining the national nodes of the Clearing House Mechanism.
- Organise training workshops to build the capacity of government officials, national focal points and other stakeholders on the use and or applications of the Clearing House Mechanism.
- In collaboration with the governments of participating countries and other partners of the convention, explore modalities of implementing the recommendationson the development of institutional and financial capacity for sustaining the Clearing House Mechanism.
- Provide support to participating countries to update the national nodes of Nairobi Convention Clearing House Mechanism and create awareness on their potential and or application to coastal and marine environment planning and management.

OUTPUT D.2.2: Established science-policy exchange platform under the Nairobi Convention for policy and for consensus on key LBSA and ICZM issues in the WIO Region.

Output Descriptions: The policy makers including high level government officials in the WIO region lacks access to relevant information on the key issues affecting coastal and marine environment in the region. This has been limiting decision-making processes in institutions that are charged with the natural resources management responsibilities. Information on issues touching on coastal and marine ecosystems is usually fragmented and policy-makers finds it difficult to access and understand this information. There is also minimal linkage or interaction between scientific organisations (research institutions and universities) that have mandate of generating data and information and national organisations charged with the responsibilities of formulating and implementing policies and strategies on the use of natural coastal resources and the environment. The overall aim of this output is therefore to establish a science-policy exchange platform for the Nairobi Convention. This is intended to facilitate more informed dialogue between scientists and policy makers in the region. The platform would also be important in ensuring high level political awareness and concensus on issues related to the protection, conservation and management of the coastal and marine environment. This output envisages development of policy briefs on LBSA and ICZM that will be presented to at least two (2) high level meetings of RECs. Policy briefs based on existing and new information will target decision-makers in participating countries. There already exists a wealth of data and information on coastal and marine environment and related systems but these need to be

packaged appropriately in form of policy bnefs that can easily capture the attention of high level government officials and policy makers who are responsible for the development and implementation of policies related to the use and management of the coastal and marine natural resources. The WIOSAP project recognises that an effective science-policy exchange platform is an important foundation for good governance and will therefore provide support to the Nairobi Convention Secretariat to establish and operationalise it.

Activities: D.2.2.1. Development of a medium-term science for policy programme to: (i) provide scientific advice required for priority policy decisions, (ii) articulate regional LBSA concerns in national, regional and global fora, and (iii) mobilise support for implementation of the WIOSAP project activities and SAP in general.

The process proposed for the delivery of activities is as follows:

- Engage a regional expert to support the Nairobi Convention Secretariat and National Focal Points in establishing a science-platform for the Nairobi Convention, including the mechanisms for operationalising it.
- WIOSAP PMU working with the Nairobi Convention Secretariat to organize a science-policy workshop with an aim of establishing the science-policy platform within the framework of the Nairobi Convention.
- The project will engage coastal/marine scientists to work jointly with social scientists and governance experts in the region and prepare policy briefs on specific LBSA and ICZM issuesand provide scientific advice required for priority policy decisions.
- The project will engage experts in the region to present policy briefs on LBSA and ICZM issues in scheduled meetings of the RECs' environment, water or marine ministers, including specific meetings between coastal/marine scientists and policy makers that will be organised by the WIOSAP PMU in close collaboration with the Nairobi Convention Secretariat.
- The WIOSAP PMU will in collaboration with the Nairobi Convention Seretariat engage regional experts to work with policy makers to articulate regional scientific concerns in national, regional and global fora, including IPCC, Global Oceans Fora, CBD, among other fora.
- With the support of the Nairobi Convention Secretariat, organise at least two (2) high level regional meetings of RECs to present and/or discuss policy briefs on specific LBSA and ICZM issues including issues related to climate change and extractive industries (fishing, mining, offshore oil and gas development, etc.)including pollution monitoring in the WIO region.

Activity: D.2.2.2. Support regional scientific platforms and networks to coordinate and implement the WIOSAP Project through partnerships, collaboration, specialized centers of excellence and capacity building.

The process proposed for the delivery of activities is as follows:

- The project would provide support to the biannual Scientific Symposium organised by the Western Indian Ocean Marine Science Association (WIOMSA).
- The project would provide support to the Forum for the Heads of Academic and Research Institutions in the WIO Region (FARI) in order to consolidate the engagement of research institutions and universities as conveners of the working groups for the implementation of various activities of the project, including also in the preparation of technical reports, guidelines, policy briefs, among others.
- Provide support to National Coordination Centres of the Nairobi Convention to build capacity and consolidate political support for the implementation of the WIOSAP project in the region.

3.5 Intervention Logic and Key Assumptions

The marine and coastal ecosystems in the WIO Region are important sources of livelihood for a large segment of coastal populations. It is estimated that the value of goods and services provided by coastal and marine ecosystems is more than 25 billion US dollars per year. In some of the countries in the WIO region, the value of goods and services provided by coastal and marine ecosystems forms a significant proportion of their GDP. The coastal and marine ecosystems also provide food, energy, climate regulation, transport and recreational services, which are critical in sustaining the diverse range of livelihood systems and ultimately the well-being of the approximately 335 million people who live in the WIO region. Marine and coastal ecosystems also underpin socio-economic development through fisheries and aquaculture, shipping, mining, oil and gas development, wind farms, cables and pipelines, and tourism and recreation.

However, the marine and coastal environment in the WIO region is threatened by a number of factors which include the following:

Physical alteration and destruction of coastal and marine habitats: The transformation and loss of habitats is one of the priority transboundary problems for the WIO region. These transformations are both physical, as in the dredging of waterways, deforestation, diversion of freshwater flows, and construction of ports and jetties, tourist resorts, and housing developments; and biological, as in over-exploitation of living resources such as coastal forests, mangroves, seagrass beds and coral reefs. The rapid population increase and expansion coupled have contributed to the use of inappropriate extractive practices and over-exploitation of the existing natural resources. Lack of integrative management approaches and spatial planning has also contributed to the degradation of coastal ecosystems.

In addition, global climate change, which is a cross-cutting concern attributed to human activities, has also has its own impacts such as abnormal rainfall patterns, increased frequency of droughts and floods and sea level rise. Finally, land reclamation for agriculture, coastal urban development and transport as well as extensive upland deforestation have caused acute problems for the major river basins in the region such as the Tana, Athi-Sabaki, Rufiji, Ruvuma, Nkomati, Betsiboka and Zambezi. The cumulative impacts of these transformations and losses have been manifested by significant physical and ecological changes in the coastal ecosystems and there has been an overall decline in many ecosystem goods and services. The five categories of PADH distinguished in the WIO-LaB TDA are: degradation of mangrove forests; degradation of seagrass beds; degradation of coastal forests; degradation of coral reefs and shoreline changes.

Alteration of freshwater flows and sediment loads from rivers: One of the key areas of concern for the WIO region relates to the interaction between river basins and the coastal and marine environment. Throughout much of the region, more so for continental states, many of the impacts to the coastal ecosystems are linked to activities taking place in river basins that are linked to the coast through river flows. The impacts in river basins have altered the nature of the river flow leading to the changes in the flow of freshwater, terrigenous sediment, nutrients and organic matter to the coastal ecosystems. These have also affected the quality of the water, mainly through the addition of nutrients and pollutants from domestic, industrial and agricultural sources. The two key problem areas related to river-coast interaction that were distinguished in the TDA are the alteration of river flow and degradation of water quality, and alteration in river sediment load.

Water and sediment quality degeneration due to pollution from land-based sources: Pollution from land-based activities such as municipal and industrial discharges, contaminated surface and sub-surface runoff and agricultural returned flows, are considerably impacting on the coastal and marine ecosystems in the WIO Region. Pollutant loads disposed of in the coastal zone is affecting the most productive areas of the marine environment, particularly the estuaries, coral reefs and other near-shore water ecosystems. Moreover, contaminants pose risks to human health and living resources in the region through transportation over long distances by ocean currents and atmospheric processes. The TDA identified five pollution categories, namely microbial contamination, high suspended solids, chemical pollution, marine litter and eutrophication.

Inadequate governance of the coastal and marine environment: In most countries in the WIO region, the existing policy, legal and institutional frameworks related to the management and conservation of the coastal and marine ecosystems are generally inadequate. Although in most of the countries there are necessary legal and institutional instruments and mechanisms, the capacity for implementation is often limited across the board. The adoption of ecosystem based management has been limited and cross-sectoral management approaches such as ICZM or Integrated River Basin Management have been less effective in curtailing the continued degradation of the coastal and marine ecosystems. Also, the arrangements for regional collaboration and exchange of lessons and best practices at regional level have been weak.

The WIOSAP Project is focussed on addressing the above issues. The detailed account of how the above causes and barriers will be addressed by the project are provided in the later sections of the project document. It is however important to emphasise that the degradation of the coastal and marine ecosystems is exacting a heavy toll on ecosystem health and ultimately on the linked socio-economic well-being of coastal communities through loss of livelihoods, coastal erosion, food insecurity and financial hardship. The poorer segments of coastal populations are often those which are more impacted by degradation of coastal and marine ecosystems. They often have limited resources to deal with complications arising from the degradation of coastal ecosystems and climate change. Lack of sustainable natural resources management regimes in the WIO Region is exacerbating the vicious cycle of resource degradation and poverty.

The continued degradation of the region's valuable and productive coastal and marine resources can potentially reverse the recent gains made in socio-economic development in the region. Although governments of the participating countries have invested significantly in the management of the coastal and marine environment, certain important gaps still exist at regional and national. The GEF incremental intervention in the implementation of WIOSAP is crucial in consolidating the gains made by the respective governments and other partners in the region. It is also crucial in addressing regional and/or transboundary issues that are beyond the capacity of individual governments.

The initial GEF intervention for the development of WIO-LaB TDA and SAP, resulted in formal identification and characterization of priority transboundary threats and their root causes, including also the policy, legal and institutional reforms and investments that are required at both regional and national levels. The WIOSAP project interventions addresses the root causes of the regionally-agreed transboundary threats. There is a strong regional ownership of the SAP and will amongst the governments in the WIO region and their partners to implement WIOSAP. This is partly demonstrated by government's adoption of the Nairobi Convention LBSA Protocol including their participation in post WIO-LaB Project activities undertaken under the auspices of the UNEP/Nairobi Convention (e.g formulation of ICZM Protocol). At the national level, the goodwill is also demonstrated by the development of National Plans of Action (NPAs) including other environmental management strategies and plans for the protection of the coastal and marine environment.

However, the WIO-LaB project implementation experience reiterates the need for continuous international assistance and catalytic financing, especially to address transboundary regional issues through multi-lateral cooperative arrangements. This need is partly as a result of capacity limitations inherent in most of the countries in the WIO region, including also finite capacity of donor agencies

to finance the required interventions at the level that can lead to long-lasting impact in the region, particularly with regard to the conservation of the critical coastal and marine ecosystems. With GEF assistance, the participating countries will benefit from GEF IW expriences through linkages to IW Learn Networks, in addition to financing of specific incremental activities detailed in this WIOSAP project document. The GEF intervention will also catalyse actions for the future policy, legal, institutional reforms and investments required in order to effectively address the root causes of the priority transboundary problems.

The key assumptions underlying the intervention logic are:

- There is a sustained political-will in the participating countries in the WIO region to implement the WIOSAP project through regional cooperation within the framework of the Nairobi Convention.

- The governments of participating countries will continue to allocate financial and other resources for the sustained implementation of the specific WIOSAP project activities at the national level, and, as a result of the catalytic effect of this GEF intervention, there will be increased long-term national-level financing for the protection of the coastal and marine ecosystems.

- Donors and other partners working on sustainable coastal and marine resource management and environmental protection in the region, including NGOs, and CBOs will continue to support cooperative partnerships for sustainable management of the coastal and marine environment at transboundary and national-levels.

- There is adequate capacity at the regional and national capacity for implementation of WIOSAP project activities and the project will build the capacity for sustaining the activities initiated by the WIOSAP Project.

Table 6 below provides an analysis of specific assumptions for each of the components of the project including the specific outcomes for each of the components.

Table 6: Assumption of project outcomes

Outcomes	Assumptions
Project objective: *To reduce impacts from land-based sources and activities and sustainably manage critical coastal-riverine ecosystems through the implementation of the WIO-SAP priorities with the support of partnerships at national and regional levels*	Political willingness exists for the implementation of the project and realisation of its objective of reducing stresses associated with the land-based sources and activities. The financial commitments by the governments of participating countries and project partners will be honoured and channelled in the implementation of earmarked activities. The governments of participating countries will improve legislation and regulations for the governance of the coastal and marine environment.
OUTCOME A.1: Critical habitats management.	Effective inter-ministerial cooperation will result in the integration of coastal and marine environmental issues into key sectors of the economic and ultimately improve visibility of coastal and marine ecosystems in national planning processes. There is political and financial commitments to implement coastal and marine ecosystem management plans through participatory approach involving participation of all key stakeholders, including coastal communities. Communities and stakeholders can be engaged and motivated

OUTCOME A.2: Appropriate tools and methods support coastal planning and management.	Community engagement and stewardship will result in better conservation outcomes for the coastal and marine ecosystems and that coastal cCommunities and other stakeholders are willing to undertake necessary measures for the protection of coastal ecosystems. The experts in the region will be able to deliver high quality assessments to most appropriately inform the decision-making processes. The project will be able to ensure effective communication of key messages to local communities and policy makers. The processes for coastal and marine planning and management in participating countries will make effective use of tools and guidelines that will be developed by the project. Effective collaboration between various key stakeholders (such as government ministries in-charge of fisheries, forestry, commerce, local government) will be possible in the development of strategies for extractive use of coastal and marine natural resources. Agreement on the development of regional indicators and assessment methods at technical level will be realised.
OUTCOME B.1: Quality of coastal receiving waters improved through pilot interventions	Demonstration projects for municipal wastewater treatment can be replicated and scaled up in other hotspot sites. Effluents will be collected, treated, recycled and/or disposed of in accordance with international best practices and there is political willingness by local communities, local administrations and government authorities to implement and replicate effluent management activities.. Pilot actions will build the necessary capacity in water quality management and enhance ICM through the empowerment of local communities and other actors at the sites of demonstration projects. Also, that there will be careful selection of communities and community 'champions' to participate in the implementation of in-country interventions.
OUTCOME B.2 Regulatory Framework for monitoring and management of pollutant loads, effluents and receiving water quality adopted at regional level.	All participating countries will apply regionally agreed water quality standards in hotspot sites and that participating countries have national frameworks that are willing to adapt the regional best practices/standards. The capacity built through improvement of nationaregulatory frameworks for pollution monitoring will contribute towards improved water quality in key hotspot sites.
OUTCOME C.1: Environmental Flow Assessments (EFAs).	Effective frameworks to resolve political economy issues and water use trade-offs can be developed as part of the environmental flow assessments. Implementation of climate sensitive Environmental Flow Assessments will be supported by appropriate guidelines, methodologies, capacity building initiatives at national level and that regional expertise will be enhanced through EFA assessments.
OUTCOME D.1 Updated policies and strong institutions underpin WIO-SAP implementation.	Key institutions in the region together with their partners have sufficient capacity to implement the project. The ICZM protocolwill be adopted by governments of

	participating countries and that the ratification of the ICZM Protocol will be given maximum priority by policy makers. The WIOSAP has adequate political support and that its implementation will succeeds at national level through the coordination and guidance of interministerial committees and regional task forces. Coordinated management, monitoring, learning and exchange at national, regional and global levels (including participation in IW:Learn processes) amongst countries, WIO-C and other partners underpins WIO SAP implementation and that there will be effective regional collaboration in the implementation of the projectand resource allocation.
OUTCOME D.2: Knowledge management systems and exchange mechanisms.	The key stakeholders are willing to expand the Nairobi Convention Clearing House Mechanism to incorporate new information that will be generated by the project. The governmentys of participating countries and other partners of the Nairobi Convention will be willing to create a sustainable financing mechanism for the convention. The Nairobi Convention Secretariat will establish synergies with RECs for the purpose of establishing science-policy exchange platform.

An important assumption of the project is that coastal and marine ecosystems will be accorded high priority by the governments of participating countries and will be integrated into relevant national natural resources management strategies and plans and that policy makers will use information generated by the project to strengthen policy, regulatory, legislative and institutional frameworks for the management of key coastal and marine ecosystems (mangroves, seagrass beds and coral reefs).

With regard to the replication of in-country interventions on municipal wastewater and effluent treatment including the in-country interventions on the restoration of critical coastal and marine habitats, it is assumed that these projects will generate sufficient enthusiasm in other participating countries in the region and this will lead them to replicate the in-country interventions, thus creating much greater regional impacts in terms of reducing stress to the coastal habitats.

Finally, an important assumption of the project with regard to the updating of the Nairobi Convention Clearing House Mechanism is that participating countries will most effectively make use of technical reports, policy briefs, guidelines, methodologies, technical manuals, lessons learned in in-country interventions, etc. posted in the CHM website and will apply these tools in the development of strategies of protecting coastal and marine ecosystems from land-based sources and activities.

3.6 Risk analysis and risk management measures

The WIOSAP project implementation would involve participation of ten (10) countries in the WIO Region including numerous other partners. This arrangement presents its own risks to the project. The detailed analysis was carried out on the possible risks to implementation of each of the components of the project including also the impacts or likelihood of each of the risks. The corresponding mitigation measures for each of the identified risk for each of the component of the project is presented in Table 7 below. In general, the main risks are divided into the following broad categories:

Inadequate cooperation and coordination: Coastal and marine environmental considerations may not be adequately incorporated into projects, programmes, policies and activities of governments of

participating countries and their partners, in the manner envisaged in the project in order to realise a comprehensive vision of sustainable marine and coastal ecosystems management in the WIO Region.

Inadequate political will: The governments of the participating countries may not accord sufficient importance to the implementation of the WIOSAP project or may not mandate key national institutions and other key partners of the project to comprehensively participate in region-wide programmes embracing the entire WIO Region as envisaged in the project.

Inadequate capacity: Mechanisms and regulations essential for integrated management of the WIO region coastal and marine natural resources may not be developed, reformed, adopted or adequately implemented due to limited capacity in the participating countries.

Inadequate financial resources: Due to economic conditions, governments of participating countries and national and regional institutions/organizations may not be able to allocate adequate human and financial resources to the implementation of the WIOSAP project.

Inadequate awareness and stakeholder participation: There may be a lack of effective stakeholder participation in the implementation of strategies and activities defined in the project. Also, some key players in the WIO region may not be fully informed about the project objectives, activities and expected outcomes, and their participation in the implementation of the project may be limited and ineffective.

Negative impacts of climate change: The participating countries may face severe environmental, ecological and socio-economic disruptions owing to impacts of climate variability and change and this may affect the ability of governments and project partners to implement priority activities envisaged in the project.

Staff turnover. Experience shows that in a complex and large project like WIO SAP, there is significant possibility of staff turnover requiring close attention to handover and keeping the institutional memory of the project activities.

Table 7: Project risks and risk mitigation measures

Risk	**Impact / Likelihood**	**Mitigation Measures**
Inadequate cooperation & coordination: Coastal and marine environmental considerations may not adequately be incorporated into projects, programmes, policies and activities, in the manner envisaged in the WIO-SAP project in order to ensure consistency with a comprehensive vision of the WIO region;	Medium / Low	The project will use the existing regional and national coordination mechanisms established under the auspices of the Nairobi Convention and which proved effective during the implementation of the UNEP-GEF WIO-LaB Project. The project would promote participatory approaches at various levels and provide financial support to local communities, CBOs and NGOs to ensure their full participation in the implementation of project activities. The project will promote the establishment of inter-ministerial coordination committees bringing onboard various government departments and institutions in the process of implementation of the project activities in each of the participating countries. This will ensure integration of project outputs into national economic development and planning processes including national environmental management processes. The project will involve and train decision-makers from a variety of government institutions and departments to increase the possibility of sustainable coastal and marine ecosystem management approaches being integrated into

		national development planning and policy-making processes. This will also include ensuring involvement of government agencies, local authorities and natural resource users who are responsible for the degradation of coastal and marine ecosystems.
Inadequate political will: *The governments of the participating countries may not accord sufficient importance to the implementation of the WIOSAP project or may not mandate key national institutions and other key partners of the project to comprehensively participate in region-wide programmes embracing the entire WIO Region as envisaged in the project.*	Medium / Low	The project will use the already established national and regional coordination/cooperation mechanisms including networks established in the implementation of the WIO-LaB Project. The project will involve senior government officials and policy-makers in the implementation of the project through inter-ministerial committees and similar national inter-sectoral coordination mechanisms. The project will provide support to National Focal Points to strengthen the existing national coordination mechanisms/processes and ensure effective consultations and participation of all relevant key government partners in project implementation.
Inadequate capacity: *Mechanisms and regulations essential for integrated management of the WIO region's coastal and marine natural resources may not be developed, reformed, adopted or adequately implemented due to limited capacity in the participating countries*	Medium / Medium	The project will involve key stakeholders in the implementation of the project and promote cooperation between local and national institutions in order to make use of available capacity in participating countries. The project will provide financial support to National Focal Points to strengthen the existing national coordination mechanisms/processes and ensure effective cooperation of all relevant key government institutions and other partners. In addition, each project component will provide for capacity building activities at all levels of decision-making and management. The project will also develop guidelines, tools, methodologies, manuals and other documents that will guide decision-makers in government institutions to implement mechanisms and regulations for integrated management. The project will provide decision-makers with policy briefs on key LBSA and ICZM issues and also train them in order to increase the likelihood of sustainable coastal and marine ecosystem management approaches being integrated into national development planning and policy-making processes.
Inadequate financial resources: *Due to the current global financial crisis, governments of participating countries and national and regional institutions or organizations may not be able to allocate adequate human and financial resources to the implementation of the WIO-SAP project*	Medium / Low	The project will demonstrate to the governments of the participating countries on the economic value of coastal and marine ecosystems and the benefits that will be accrued through enhanced management and protection from land-based sources and activities. Demonstration of project benefits will increase the support of the governments and other partners to the project including also to the Nairobi Convention. The project will provide specific technical support to project partners to develop sustainable financing modalities for high-cost investments such as municipal waste-water treatment including modalities of financing pollution monitoring programmes on long-term basis. The regional partnership initiatives will strengthen the foundation of strategic and sustainable financing evidenced by co-finance mobilized for the project.

Staff turnover	Medium/Low	Given the complexity and the size of the project, skilled and regionally experienced personnel must be recruited to the PMU. The project will be housed within the UNEP Nairobi Convention which can hire new, additional staff as it may be required in the course of project implementation. The Convention Secretariat will provide backup support until new staff is recruited.
Inadequate awareness: There may be a lack of effective stakeholder participation in the implementation of strategies and activities defined in the project. Also, some key players in the WIO region may not be fully informed about the project objectives, activities and expected outcomes, and their participation in the implementation of the project may be limited and ineffective.	Medium / Low	Project activities related to assessment and economic valuation of marine and coastal resources coupled with outreach and educational campaigns targeting various stakeholder groups will raise awareness on the importance of investing in and sustainably managing the WIO resources. The project will develop an effective communication strategy targeting a diverse range of stakeholders. The project will develop and maintain a good level of stakeholder ownership; this concerns not only ownership by participating government agencies and institutions, but also NGOs, CBOs, the private sector and the local communities.
Negative impacts of climate change: *The participating countries may face severe environmental, ecological and socio-economic disruptions owing to impacts of climate variability and change and this may affect the ability of governments and project partners to implement priority activities envisaged in the project.*	Medium / Low	The WIO-SAP project will provide technical and financial support to participating countries to undertake studies on the vulnerability of coastal and marine ecosystems to climate change and develop appropriate mitigation measures. The project will support monitoring and assessment of the coastal and marine habitats to better identify changes, and also develop extractive use strategies that promote alternative livelihood systems to coastal communities to reduce their reliance on coastal natural resources. The project will improve the understanding of climate change impacts among policy makers through preparation of policy briefs and also through science-policy forums and provision of assistance in preparation of regional policy positions on climate change.

The SAP has built in measures to mitigate the above-mentioned risks, including specific targets and actions aimed at mobilizing the required political support, building capacity, enhancing cooperation and coordination and creating sustainable financial mechanisms. Specific targets and activities in this regard have been included as part of various components of the WIOSAP project.

3.7 Consistency with National Priorities or Plans

The ten (10) countries in the WIO region, which are also the contracting parties to the UNEP/Nairobi Convention, have endorsed the WIOSAP project and also formally adopted the legally-binding LBSA Protocol under the Nairobi Convention. In addition, the participating countries have to varying degrees, made substantial progress in developing and implementing national polices plans and legislation that are considered relevant in providing the required national frameworks for addressing the impacts of land-based activities on coastal and marine ecosystems. These include, in some of the countries, constitutional environmental rights and national framework legislation on environmental protection that encompasses also the coastal and marine environment. Most of the participating countries have also enacted relevant legislation on specific issues such as water quality and ICZM, among others. These efforts by the governments of participating countries are clear indications of the high priority given by governments to the coastal and marine environment and ultimately on the implementation of the WIOSAP project.

During the SAP development process, the participating countries identified relevant national policies, strategies and/or plans which in effect provide the national plans of action for addressing the impacts of land-based activities on coastal and marine environments including implementation of the UNEP-GPA, the WIO–LaB SAP and the Nairobi Convention LBSA Protocol, as presented in Table 8 below. The participating countries have also developed NBSAPs, Sustainable Development Plans, UNDAFs, among others, which are considered relevant to this project.

Table 8: National policies or plans as identified by each WIO country for addressing LBSA issues

Country	National policy or plan which includes LBSA issues
1. Comoros	National ICZM Plan
2. Kenya	NPA-LBSA within the National ICZM Policy Framework
3. Madagascar	National ICZM Plan
4. Mauritius	NPA-LBSA within the National ICZM Policy Framework
5. Mozambique	Strategic Environmental Assessment of the Coast (SEAC)
6. Réunion (France)	Managed within EU Frameworks
7. Seychelles	National Environmental Management Plan (NEMP)
8. Somalia	Not engaged due to political instability in the country
9. South Africa	NPA-LBSA
10. Tanzania	NPA-LBSA within the National ICZM Policy Framework

Finally, in terms of demonstrating consistency with national priorities and plans, the WIO-LaB SAP project development process undertook several rounds of national stakeholder consultation workshops in each of the participating countries to review and agree on the proposed objectives, targets and actions, and rank them according to the specific priorities of each country. Table 9 below summarises the outputs of these national stakeholder's consolidation workshops detailing the country-level priority with respect to various components and activities of the WIO-LaB SAP. It must however be noted that subsequent to the adoption of the WIO-LaB SAP, there has been further regional consultations during the PPG phase of the project and this has resulted in the modification of some of the project components and activities as detailed in this WIOSAP project document. This modification however has not in any significant way changed the original intensions of participating countries and their partners as detailed in the WIO-LaB SAP.

Table 9: The national prioritisation of the WIO-LaB SAP activities based on consultative workshops held in participating countries during the process of developing WIO-LaB SAP. Note that France Reunion and Somalia were not part of the WIO-LaB Project.

		Comoros	Kenya	Madagascar	Mauritius	Mozambique	Seychelles	South Africa	Tanzania	Regional	Average
A.	**Critical coastal habitats protected, restored and managed for sustainable use**										
1.	Incentives to encourage compliance with best practice in Critical Habitat management established	**H**	**VH**	**H**	**H**	**H**	**H**	**M**	**VH**	**M**	**H**
2.	Coastal zoning based on integrated economic, social and environmental	**VH**	**VH**	**VH**	**VH**	**VH**	**VH**	**M**	**H**	**H**	**VH**

		Comoros	Kenya	Madagascar	Mauritius	Mozambique	Seychelles	South Africa	Tanzania	Regional	Average
	considerations implemented										
3.	Critical Habitat management in place in all countries contributing to ecologically sustainable ecosystem services and regional protection.	**VH**	**VH**	**VH**	**H**	**H**	**H**	**VH**	**H**	**VH**	**VH**
4.	A regional monitoring and evaluation plan established and implemented for Critical Habitats, Coasts and Shorelines	**H**	**H**	**M**	**H**	**VH**	**M**	**H**	**H**	**H**	**H**
5.	ICZM legislation in place in all countries	**H**	**VH**	**H**	**H**	**M**	**VH**	**M**	**VH**	**H**	**H**
6.	National legislation to improve management of bilateral and regional issues strengthened	**H**	**M**	**M**	**M**	**M**	**L**	**M**	**H**	**M**	**M**
7.	Awareness of the importance of critical habitats raised significantly	**VH**	**H**	**VH**	**VH**	**M**	**H**	**H**	**VH**	**H**	**H**
B.	**Water quality meets international standards by the year 2035**										
1.	Effluent discharge standards developed and regionally harmonized	**VH**	**H**	**VH**	**H**	**M**	**VH**	**H**	**H**	**M**	**H**
2.	Marine water standards developed and regionally harmonized	**VH**	**VH**	**VH**	**H**	**M**	**M**	**H**	**VH**	**M**	**H**
3.	Regional best practice framework models for municipal wastewater management developed and adopted	**M**	**VH**	**H**	**H**	**VH**	**VH**	**H**	**VH**	**M**	**H**
4.	Collection, treatment and disposal of effluents undertaken in accordance with regional standards in pilot sites	**H**	**VH**	**VH**	**H**	**H**	**H**	**VH**	**VH**	**H**	**H**
5.	Environmental Management Systems and Cleaner Production Technologies encouraged	**H**	**H**	**H**	**H**	**H**	**H**	**H**	**H**	**H**	**H**
6.	Stakeholders sensitized and political support harnessed in favour of pollution prevention in key sectors	**VH**	**VH**	**VH**	**H**	**H**	**VH**	**VH**	**VH**	**H**	**VH**
C.	**River flows are wisely and sustainably managed**										
1.	Awareness raised and EFA tool promoted in the WIO region	**H**	**VH**	**H/VH**	**M**	**H**	**VH**	**H**	**H**	**H**	**H**
2.	Capacity for applying EFA increased amongst stakeholders	**VH**	**H**	**VH**	**H**	**H**	**VH**	**H**	**H**	**H**	**H**
3.	EFA conducted and operating rules (EQOs) integrated in river basin management in selected basins in the WIO region	**VH**	**H**	**VH**	**M**	**M**	**VH**	**H**	**H**	**H**	**H**
4.	Methodologies agreed upon and tools developed for coherent application of EQOs in both freshwater and coastal management	**H**	**H**	**VH**	**H**	**M**	**H**	**M**	**H**	**H**	**H**
5.	Collaboration between SWCI (RBOs, Technical Committees etc.)	**VH**	**VH**	**H/VH**	**M**	**M**	**H**	**H**	**VH**	**M**	**H**

		Comoros	Kenya	Madagascar	Mauritius	Mozambique	Seychelles	South Africa	Tanzania	Regional	Average
	and Nairobi Convention Secretariat catalyse policy discussion on coastal and marine issues.										
6.	National freshwater management and coastal zone management frameworks (policies, legal, and institutional) fully integrated	**H**	**VH**	**VH**	**H**	**H**	**H**	**VH**	**VH**	**H**	**H**
7.	Effects of impoundments and dam operations on river flow variability and sediment discharge analysed and results implemented	**H**	**H**	**VH**	**M**	**VH**	**L**	**M**	**H**	**H**	**H**
8.	Significance of wetlands on flow variability, sediment discharge and coastal/marine productivity investigated and wisely managed.	**VH**	**VH**	**VH**	**H**	**H**	**L**	**H**	**VH**	**H**	**H**
9.	Catchment management impacts on coastal habitats, shorelines and water quality investigated and results adopted in river basin and coastal and marine management	**VH**	**VH**	**VH**	**H**	**VH**	**VH**	**H**	**VH**	**H**	**VH**
D.	**Effective governance and stakeholders collaboration**										
1.	Capacity for ecosystem based management improved (including e.g. ICZM, SEA, EIA and EFA.)	**VH**	**VH**	**H**	**VH**	**VH**	**H**	**H**	**H**	**VH**	**VH**
2.	Appropriate legal and regulatory frameworks for LBSA management in place and implemented at national level	**H**	**VH**	**H**	**H**	**VH**	**H**	**M**	**VH**	**H**	**H**
3.	Awareness of good marine and coastal management raised at the level of policy makers, legislators, civil society & private sector	**VH**	**H**	**H**	**VH**	**VH**	**H**	**VH**	**H**	**H**	**H**
4.	Regional legal framework for LBSA updated and harmonized with multilateral environmental agreements	**H**	**VH**	**M**	**VH**	**H**	**M**	**H**	**M**	**H**	**H**
5.	Regional co-ordination and inter-sectoral governance improved	**M**	**VH**	**H**	**L**	**H**	**VH**	**VH**	**H**	**H**	**H**
6.	Appropriate financial mechanisms developed and implemented	**H**	**VH**	**VH**	**M**	**VH**	**VH**	**VH**	**VH**	**H**	**VH**
7.	Regional knowledge management undertaken effectively	**M**	**VH**	**VH**	**H**	**H**	**M**	**H**	**H**	**H**	**H**

Key: VH = Very High; H = High; M = Moderate; L = Limit

3.8 Incremental Cost Reasoning

There remains a need for international assistance and catalytic financing in the WIO Region, especially to address regional, transboundary coastal and marine issues through technical assistance and multi-lateral cooperation. The existing and future baseline level investments without GEF will address mostly national-level requirements, and will not adequately generate the required regional collaboration in policy, legal and institutional reforms that are necessary for addressing the root

causes of the priority transboundary issues (see Table 10). The GEF Increment of the WIOSAP implementation project will be handling the identified and agreed transboundary concerns of the member states and also strengthen the management of the interlinked WIO freshwater and coastal ecosystems as follows:

Component A: Sustainable management of critical habitats: This component recognizes the enormous value of healthy critical coastal and marine habitats for the future well-being of people in the WIO region. The GEF increment will strengthen transboundary collaboration and management through on the ground activities related to spatial planning, site-specific management interventions and habitat restoration (outcome A.1).

Component B: Improved water quality: The GEF increment, along with national and other co-financing will support the implementation of in-country interventions on the appropriate, cost-effective technologies (such as constructed wetlands) for wastewater management and effluent treatment and human and regulatory capacity, including building for the capacity for transboundary monitoring, replication and up-scaling of the demonstration project (outputs B.2.3 and B.1.1 – B.1.3). A number of demonstration project sites in key hotspot sites have been prioritized according to their contributions to stress reduction, their replicability and potential linkages to other WIOSAP activities. The WIO-LaB TDA and SAP processes identified priority hotspot sites on which the in-country interventions to be implemented under the WIOSAP Project would target (see Annex 3 in the WIO-LaB SAP). The selection of the hotspot sites was based on a criteria developed during the WIO-LaB TDA process. GEF funds will catalyze the national governments and WIO-C co-financing contributions to the in-country interventions in priority hotspot sites. At the moment, most of actions are country-based with limited transboundary impacts.

Component C: Sustainable management of river flows: Many priority actions in this component of the WIOSAP relate to building the capacity of the participating countries to conduct environmental flow assessments (EFA) and demonstrate the utility of such decision support tools in river basin management. Baseline and co-finance work by some of the WIO-C members such as IUCN and WWF in testing appropriate methodologies, implementing flow assessments and in building a regional network for learning and exchange, will contribute substantially to the GEF intervention. GEF finance will support flow assessment in-country interventions in at least two key transboundary river basins where already there are strong linkages between river flows and coastal ecosystems. It is expected that the GEF finance will contribute in establishing the impacts of land-based activities transmitted through river flows over to the marine and coastal areas and interventions measures that need to be undertaken to address these impacts. The EFA scenarios that will be developed will be subjected to participatory stakeholder consultation process to promote acceptability and replication. GEF funds will catalyze national and WIO-C co-finance to the EFA in-country interventions including activities focused on controlling land-based impacts to the coastal and marine environment. GEF intervention will also compliment previous and ongoing assessment works in Pangani Basin (through IUCN, GEF and EU support) and Wami Basin (through support from Florida International University, USAID and Coca-Cola) in Tanzania; and Zambezi Basin (through support from WWF, World Bank, the International Rivers Network, among others). Some of the basins will provide opportunities to complement in-country interventions on coastal management and water quality (components A and B).This is particularly so given that some of the key sites targeted for the implementation of in-country interventions on the restoration of degraded coastal ecosystems including those of wastewater/effluent treatment, are located in estuaries and deltas of river systems draining to the coast.

Component D: Governance and Regional Collaboration: GEF support contributes to other important incremental benefits as well: freshwater and marine ecosystems in the region are typically administered through different ministries (water and environment respectively) which in practice means that the holistic nature of these systems and associated global and regional benefits are not maximized. In many cases upstream management actions can have a devastating impact on downstream coastal ecosystems. GEF support will make an important incremental contribution in

fostering the integrated management of freshwater basins and their adjacent coastal areas. This will be important pioneering work in the region and these efforts will be monitored closely to promote learning and exchange and replication in other basins and their associated coastal areas. Finally, replication and sustainability of the benefits arising from the GEF increment will be assured through establishment of linkages with the Nairobi Convention Programme of Work as well as the programmes undertaken by the WIO-C partners that have long-term investments in the WIO region. This will guarantee continuity, replication and transfer of best practices from the WIO-SAP GEF investment well beyond the lifespan of the project.

GEF support also contributes to other important incremental benefits as well: Freshwater and marine ecosystems in the region are typically administered through two different ministries (water and environment respectively) which in practice means that the holistic nature of these systems and associated global benefits are not maximized and oftentimes upstream management actions can have a devastating impact on coastal resources. GEF support will make an important incremental contribution in fostering the conjunctive management of freshwater basins and their adjacent coastal areas. This will be important pioneering work in the region and these efforts will be monitored closely to promote learning and exchange and replication in other river basins and their associated coastal areas.

Table 10: Key outcomes of the WIOSAP Project in comparison to current baseline.

Baseline Scenario (Business As Usual) **B**	**GEF Incremental Contribution** (what the GEF Project will contribute) **A**	**Key Outcomes expected with the Alternative Scenario** (BAU+GEF Increment) **A+B**
COMPONENT A: SUSTAINABLE MANAGEMENT OF CRITICAL HABITATS. Only a few countries in the WIO Region have capacity for the development and implementation of marine spatial plans. The sustainable management of the coastal and marine ecosystems in the WIO region constrained by lack of data and information on the value of the critical coastal and marine ecosystems. There is limited capacity in most of the participating countries for economic valuation of coastal ecosystems. Also, the capacity for vulnerability assessment and spatial planning is generally weak. The coastal and marine natural resources are already under pressure due to over-exploitation and there are no extractive use strategies for the management of the harvesting of natural resources. There are no standard regional indicators for monitoring the state	Strengthen transboundary collaboration and management though on the ground activities related to spatial planning, site-specific management interventions and habitat restoration (outcome A.1). Support the development of tools, methodologies and assessments including economic valuation, guidelines for spatial planning and vulnerability assessment, livelihood strategies on extractive use activities and a regionally agreed monitoring framework with indicators. Enhance the capacity of the WIO countries to increase the resilience of key coastal ecosystems to the human impacts including the impacts related to climate change and variability. Building the capacity for economic valuations of critical coastal and marine ecosystems and create increased awareness on the importance of conservation and protection of the coastal and marine ecosystems within the government decision-making systems. Development of sustainable	Increased use and application of coastal management tools, methodologies and assessments including economic valuation, guidelines for spatial planning and vulnerability assessment, will provide an important foundation for regional collaboration and harmonized management in the region. Enhanced capacity of the WIO countries to increase the resilience of key coastal ecosystems to the human impacts including the impacts related to climate change and variability. The spatial plans will resolve conflicts in uses of coastal and ocean spaces. Increased capacity for economic valuations of critical coastal and marine ecosystems including increased awareness on the importance of conservation and protection of the coastal and marine ecosystems within the government decision-making systems.

of the coastal and marine ecosystems. Each of the participating countries in the region uses different set of indicators that may not necessarily be comparable at regional level. Few projects have being undertakern on the restoration of degraded mangrove forests. However, there has been limited attempt to restore degraded seagrass beds and coral reef ecosystems. Lack of baseline data on coastal and marine ecosystems particularly data on the mangroves, seagrass beds and coral reefs.	strategies for extractive use of coastal natural resources and implementation of the same in collaboration with local communities who are dependent on these resources. The development and adoption of regionally agreed indicators and monitoring protocols to allow national and regional institutions to monitor changes in the state of the coastal and marine ecosystems and assesss the effectiveness of various intervention measures implemented in the WIO Region. Increased levels of awareness and capacity leading to enhanced community engagement, responsibility and good governance at local level, which in turn encourages improved management of shared coastal resources and better conservation outcomes for coastal and marine ecosystems in target sites. Wider replication of successful models and best practices developed at target sites leading to broader regional impacts. Enhancement of the capacity of target countries in to develop coastal ecosystems management plans. Implementation of in-country interventions on the restoration of coastal ecosystems to contribute in the realisation of global environmental benefits. Implementation of Integrated Coastal Management (ICM) plans including building the capacity for ICM implemntation at local level using participatory approaches. Economic valuation of coastal and marine ecosystems.	Increased capacity for vulnerability assessments and spatial planning to support management and monitoring of the state of coastal ecosystems in participating countries institutions. Improved socio-economic well being of coastal communities through implementation of sustainable strategies for extractive use of coastal natural resources. The alternative sustainable livelihood systems for the local coastal communities will curtail the degradation of the coastal and marine ecosystems. Regional institutions charged with monitoring responsibilities will apply regional indicators that will allow mandated institutions in the WIO region to monitor changes in the state of the coastal and marine ecosystems and assesss the effectiveness of various intervention measures. The indicators would also facilitate baseline assessment of key coastal ecosystems to generate new data and information. Sustainability of coastal and marine ecosystem monitoring programmes through consolidation of national effort and involvement of users of monitoring data and information. Reinforcement of the network of the Marine Protected Areas (MPAs) in the WIO region and mitigation of the impacts of climate change and habitat loss due to unsustainable practices. Increased realisation of local, national, regional and global environmental benefits through restoration of degraded coastal ecosystems in hotspot sites.

		Enhanced capacity of the participating countries and institutions to restore degraded coastal and marine critical habitats. This will also contribute in mitigating the impacts of climate change. Improved formulation of coastal and marine management policies through creation of awareness to policy maker. Increased and widespread replication of ecosystem restoration projects in other equally important sites in the target countries, thus increasing the impact at national and regional level. Improved management of coastal areas through implementation of Integrated Coastal Management (ICM) plans including building the capacity for ICM implemntation at local level. The participating countries will start to implement ICM in selected coastal zones. Increased capacity to undertake economic valuation of coastal and marine ecosystems including integration of economic valuation in coastal management and planning in participating countries. Increased awareness and understanding of the contributions and the value coastal and marine ecosystems among policy makers and decision-makers in participating countries. This will improve the visibility of coastal and marine issues in national planning processes.
COMPONENT B: IMPROVED WATER QUALITY The degradation of the quality of the coastal and marine waters in the WIO Region is a growing problem in the WIO region.	Development of a regionally harmonized regulatory framework for monitoring pollutant loads, effluents and water quality standards	Increased awareness and replication of wastewater treatment in-country interventions using

In most countries in the WIO Region, management of municipal wastewater is not sufficiently addressed by the governments. Increasing levels of pollution resulting from discharge of untreated effluents into the inshore waters of the WIO Region, are threatening human health and the integrity of the coastal and marine ecosystems. The capacity for the wastewater management in the WIO region is limited. There lack of participation and poor awareness among local communities on issues related to water quality management. Most countries in the WIO region do not have long-term water quality monitoring programmes, in part due to limited capacity and also due to lack of appreciation among the policy makers of the importance of protecting coastal and marine ecosystems from land-based sources of pollution. Most of the coastal and marine monitoring works are usually sporadic, short-term and largely unsustainable and most countries have not enacted necessary water quality standards or have standards that do not meet international norms. There are no receiving water standards for the marine waters in the region. In countries that have developed wastewater standards, the same are usually ineffetive due to limited capacity for enforcement. There are different sets of effluent and water quality standards in participating countries and there are no harmonised regional effluent and marine water quality standards. There is lack of institutional and human capacity, not only for the development of water quality standards, but also for enforcement of the same. Also, there is weak enforcement of existing standards	of receiving coastal waters. Implementation of in-country interventions on the appropriate, cost-effective technologies for wastewater management and effluent treatment and building of human and regulatory capacity for monitoring, replication and upscaling of the demonstration project. Identification and selection of technologies for effluent treatment with community participation for possible future regional replication Development of regionally harmonised monitoring framework using agreed methodologies and indicators so that results can be compared across the region. Development and adoption of regionally harmonised effluent and marine water quality standards. Building of capacity in participating institutions for the implementation of regionally harmonised regulations and monitoring.	appropriate, cost-effective technologies. Increased human and regulatory capacity for monitoring, replication and up- scaling of the wastewater treatment in-country interventions. Increased adoption of low-cost and effective technologies for the treatment of wastewater in hotspot sites leading increased treatment of municipal effluents before they are discharged into the coastal waters. Icreased awareness and participation of local communities and other key stakeholders in wastewater and effluent management thus reducing stress to the coastal and marine ecosystems. Increased and more effective ccordination of relevant ministries in the implementation of the vision of a pollution-free coastal environment. Institutions in participating countries implements their pollution monitoring programmes using regionally agreed methodologies and indicators so that results can be compared across the region. The adoption and application of regionally harmonised effluent and marine water quality standards and establishment of pollutant loads monitoring framework leading to major reduction in pollution of coastal waters by effluents and raw sewage from urban areas. Increased capacity in participating institutions on the development and enforcement of water quality standards, including

due to lack of institutional and human capacity for implementation. Most countries do not have sustainable pollution loads monitoring programmes and in few countries that have them, the capacity for implementation is often very weak and unsustainable. Modalities for sustainanable financing of water quality monitoring programmes at national level are non-existent in most of the countries.		implementation of regulatory, monitoring and financing modalities.
COMPONENT C: SUSTAINABLE MANAGEMENT OF RIVER FLOWS There is poor management of river basins resulting in hydrologic alterations that are now impacting the critical coastal and marine ecosystems. There is limited application of ecosystem based management tools such as Integrated Water Resources Management (IWRM) through reforms in the water sectors. Most of the participating countries has been limited by lack of appropriate decision-making tools for allocating water to various users including water allocation (environmental flows) for sustaining ecological systems. There is limited capacity for environmental flow assessment in most of the participating countries, with the exception of South Africa. In most countries in the region, the capacity for undertaking and implementing EFA is limited as there are few experts in the region who are conversant with the EFA methodologies. Only a few river basin authorities have capacity to undertake EFAs and this capacity is mainly concentrated in South Africa. In most of the participating countries, the allocation of water	Address the land-based impacts in river basins that are transmitted through river flows to the coastal and marine ecosystems. Support of flow assessment in-country interventions in at least two key river basins where already there are strong linkages between river flows and coastal ecosystems. Build capacity for Environmental Flow Assessment (EFA) and implementation in the region. Create awareness on the benefits of EFA and integration of EFAs into coastal and marine management. Support environmental flow assessment studies and assist policy makers and river basin managers to appreciate the environmental and socio-economic implications and trade-offs of their water investments. Implementation of environmental flow assessment results and recommendations in selected river basin, in a consultative and participatory process. Enhancement of institutional capacity for environmental flow assessment (EFA) in key institutions the WIO region.	Increased capacity for environmental flow assessment (EFA) and implementation in participating countries in the region. Increased awareness on the benefits of EFA leading to more effective cooperation between river basin and coastal zone management organisations. This will result in better management and planning of development in river basins, ensuring that developments in river basins take into account coastal and marine issues. The environmental flow assessment studies will assist policy makers and river basin managers to appreciate the environmental and socio-economic implications and trade-offs of their water investments, and serve as a basis for negotiating an equitable trade-off between development of river basins and the protection of critical coastal and marine ecosystems. Reduction in the degradation of the coastal and marine ecosystems due to upstream/river basins activities.

resources is done with little regard for downstream ecosystems. The participation of key river basin stakeholders in river basin management is often limited in most of the countries.		
COMPONENT D: GOVERNANCE AND REGIONAL COLLABORATION The governance frameworks for coastal and marine ecosystems in most of the participating countries are weak. Most of the countries are characterised by poor coordination, inappropriate and incoherent legislation and lack of adequate institutional framework for managing stresses. There is poor management of data and information on the coastal and marine ecosystems. There is limited inter-sectoral integration in the management of coastal and marine areas. There is limited application of inter-sectoral governance instruments such as integrated coastal zone management (ICZM) in most of the countries. There is lack of effective governance of coastal and marine environment in the WIO Region. LBSA Protocol delivered by WIO-LaB Project is yet to be ratified by the participating countries. National interministerial committees including other national coordination mechanisms lack information and awareness on the key issues related to coastal and marine environment. The existing Nairobi Convention Clearing House Mechanism (CHM) has limited capacity and does not incorporate data and information on national and regional investments and projects outputs. The policy makers including high	Enhancement of legal and regulatory frameworks for LBSA management at regional and national level, including finalisation of ICZM Protocol and implementation of LBSA Protocol as well as creating awareness among policy makers. Strengthening of inter-ministerial committees and regional task forces established within the framework of the Nairobi Convention so that they are able carry out their specific roles in the implementation of project activities. Establishment of effective project coordination structures including establishment of the steering committee and inter-ministerial committee. Strengthening of data and information management and exchange platforms particularly the Nairobi Convention Clearing House Mechanism. Building of the capacity for the application of ICZM Principles in coastal planning processes in the region. Strengthening of policy, legal and institutional frameworks for addressing LBSA issues in the region through provision of support to countries to ratify the LBSA Protocol as well as establish of the mechanisms for its implementation in target participating countries. Strengthening of the regional and national task forces such PADH, MWM, and WSQ and creation of new task forces such as Environmental Flow Assessment (EFA) Working Group. Establishment and operationalisation	Increased capacity for effective environmental governance through enactment of appropriate legal and regulatory frameworks for LBSA management at regional and national. Increased awareness among policy makers on the need for the protection and management of the coastal and marine environment in the WIO Region. Inter-ministerial committees and regional task forces established within the framework of the Nairobi Convention will also be strengthened so that they are able carry out their specific roles in the implementation of project activities. Effective project coordination, regular steering committee and task force meetings including also provision of quality technical support to participating countries. Increased use of the Nairobi Convention Clearing House Mechanism by the participating countries Increase value of the investments of national and regional partners, promoting a shared sense of regional responsibility for the sustainable management of the coastal and marine ecosystems through harmonized regional policy, norms and standards and shared learning and experiences.

level government officials in the WIO region lacks access to relevant information on the key issues affecting coastal and marine environment in the region. There is minimal linkage or interaction between scientific organisations (research institutions and universities) that have mandate of generating data and information and national organisations charged with the responsibilities of formulating and implementing policies and strategies on the use of natural coastal resources and the environment.	of the regional WIOSAP project management unit including also the establishment of national project offices in participating countries. Establishment of a science-policy exchange platform for the Nairobi Convention.	Improved capacity for the application of ICZM in coastal planning processes in participating countries. Increased momentum for the ratification of the LBSA Protocol as well as establishment of the mechanisms for its implementation in target participating countries. Strengthened and more effective regional task forces that will be invaluable in the implementation of the WIO-SAP Project activities. Increased commitment of the governments to the Nairobi Convention, particularly with regard to their biannual contributions to the trust fund of the convention. This on long-term basis will make the convention financially sustainable and robust and capable of implementing concrete actions on the ground. Nairobi Convention Clearing House Mechanism will play a greater role in the exchange of information and sharing of lessons and experiences in the management of the coastal and marine ecosystems in the region. The more informed dialogue between scientists and policy makers in the region, thus ensuring high level political awareness and concensus on issues related to the protection, conservation and management of the coastal and marine environment.

3.9 Sustainability

The sustainability of WIOSAP project activities is considered important for the continued support and engagement of the governments of participating countries and their partners in the protection of the coastal and marine ecosystems. This is considered critical since most of the WIOSAP project activities are designed mainly to build capacity of the participating countries and their partners to most effectively implement measures that would lead to the sustainable management and protection of the coastal and marine ecosystems in the region. Although, significant short-term outcomes are

expected to be delivered in the next five (5) areas, the project is essentially focused on providing a firm foundation for the future. The project is designed to promote the long-term sustainability of all its activities and outcomes through integration of project implementation arrangements into the existing national and regional coordination mechanisms, integration of project activities into existing national and regional institutions, involvement of all key stakeholders including local communities and NGOs in the identification and implementation of project activities, building of capacity of government institutions to develop and implement management plans and enforce regulations. Sustainability will also be ensured by the project through building of the capacity of local communities and NGOs to participate in coastal planning processes as well as in the monitoring of management effectiveness, development of extractive use strategies, development of modalities of ensuring sustainable financing of coastal monitoring and assessment programmes, development of modalities of ensuring sustainable financing of the Nairobi Convention to make a robust organization in the region. The project also has strong awareness creation elements designed to provide information and increase awareness on the importance of the coastal and marine ecosystems among the natural resources managers, decision-makers and policy-makers. It is intended that this will improve visibility of coastal and marine issues in participating countries and therefore lead to greater prioritization and increased budgetary allocation for coastal and marine issues. The WIOSAP project recognises three aspects of sustainability which it will strive to achieve as detailed below:

Institutional Sustainability: The process for the development of the WIOSAP project was designed as a process that would be sustained beyond the life of the project through the Nairobi Convention mechanism. This approach will ensure continuation of project activities once the project ends. The national coordination mechanisms established in participating countries under the WIO-LaB Project would be strengthened by the project in order for these mechanisms to continue to play a greater role in the functioning of the Nairobi Convention once GEF funding ends. The regional and national task forces and working groups established under the auspices of the Nairobi Convention represents a continuation of bodies and functions tried and tested during the WIO-LaB project. It is expected that these bodies will be re-invigorated during the implementation of the project.

The WIO-SAP Project will undertake specific measures to ensure activities initiated by the project are sustained beyond the life of the GEF project grant. Firstly, the project would be supporting an ongoing SAP implementation process with a far longer time horizon and as part of a broader Nairobi Convention work programme which is embedded in the institutional framework of the convention. Specifically, the project will enhance institutional sustainability through activities focused on: capacity building of institutions and long term planning of investments including reporting requirements of the LBSA Protocols. The capacity building is embedded in each component and consolidated in Component D through scientific underpinning and dissemination of best practices.

An indicator of sustainability is demonstrated by the WIO countries continued commitment to long-term financing of the Nairobi Convention processes including also the implementation of the LBSA and ICZM protocols. As such, the LBSA and ICZM protocols will provide foundation for long term national commitment, implementation, and compliance. In addition, UNEP is expected to continue to support the participating countries by hosting the Nairobi Convention Secretariat which is the executing agency of the WIOSAP project. Modalities of integrating the WIOSAP PMU staff into the Nairobi Convention Secretariat will be explored in order to ensure activities initiated by the project continue even after the GEF intervention ends.

Financial Sustainability: The main indicator of financial sustainability will be the extent to which the participating countries themselves undertake the financing of the Nairobi Convention Work Programme/activities and the various WIOSAP activities through provision of co-financing contributions. The project will engage the participating countries in a consultative process to reach an agreement on the future financing of activities that will be initiated under the WIOSAP project once the GEF funding ends. Most of the WIO countries have expressed their willingness to make substantial financial inputs to address the environmental problems of the WIO region as evidenced by the extent of co-financing approved by each of these countries to this project.

The co-financing is a key condition of project activities at national, local and demonstration site levels and will include consideration of financing ongoing recurrent costs of investments. Identifying and supporting leaders and environmental champions at local level will be an operating strategy of the project while identifying the long-term investments and funding required will be a target of the project at national and regional levels. The project recognises that sustainability can be assured through promotion of country ownership of the project activities and by ensuring that the project works towards the realisation of local, national, regional and global environmental goals and benefits over the medium to long-term. In this respect, the project management would insist on the preparation of project feasibility plans for long-term sustainability of in-country interventions.

With assistance from the Nairobi Convention portfolio and project tracking services, country programmes would be expected to identify external funding sources for baseline and further project activities, and explore other modalities like service management contracting with other donors/funding facilities and similar schemes. The project would also explore modalities of long-term financing of coastal monitoring and assessment programmes through establishment of linkages between service providers (e.g. research institutions and universities, etc.) and key users of the coastal environment (e.g. fishing companies, tourist hotels, shipping companies, ports authority, mariculture firms, mining companies, oil and gas companies, etc.). By joining forces with other donor, governmental agencies and private sector at local level, and with partner programmes in UNEP and GEF, the WIO-SAP Project would realize a broader impact and enhance sustainability.

The co-financing to the WIOSAP Project will remain important even after the end of the project around 30 active projects and programmes with an annual value of over US$12 million coordinated by regional and international NGOs will continue to be implemented in the WIO Region. National governments have already committed to mainstreaming the priorities of the SAP into national policy and legal frameworks, development plans and budgets. Linkages between the SAP and each country's NAP will form a crucial element of the project's sustainability strategy.

In some of the demos financial/economic instruments should be tested so that such instruments can be more adopted within the pilot areas and Nairobi Convention for their sustained financing for activities in the future.

Social Sustainability: Involvement of local communities in the implementation of WIOSAP Project activities is considered important for the attainment of social sustainability. The Project will strive to promote broad stakeholders involvement in the identification and selection of in-country interventions on wastewater management and those on the restoration of degraded critical ecosystems in hotspot areas. In addition, the project would also build the capacity of local communities to manage interventions and contribute meaningfully on national debates on coastal environmental conservation. The project would through implementation of ecosystem restoration in-country interventions provide an opportunity to the local communities to develop gender-sensitive income-generating activities (e.g. eco-tourism) that can be used to supplement the financing from the governments and donor agencies.

Empowering communities through capacity-building, participatory decision-making including also building of the capacity of local communities to design and manage projects on long-term basis is also considered important in sustaining project activities over the medium to long-term. The project will help identify business opportunities in areas such as sustainable tourism, ecosystem restoration, wastewater treatment, solid waste management and other environmental services. Improved enforcement of environmental regulations and collection of user charges will help generate such business opportunities.

3.10 Replication

The WIOSAP project has a strong potential to provide experiences and lessons that can not only be replicated throughout the region, but also those that can be adapted to other regions of the world, particularly those aimed at reducing stress to the coastal and marine environment from land-based sources and activities. Most of the regional seas in the world face similar challenges in the management of land-based activities and these will benefit immensely from the experiences and lessons that will be gained in the implementation of the project. Good example is in the case of the development of the ICZM Protocol. Given that the Nairobi Convention will be the second regional sea that will have developed an ICZM protocol, the experiences and lessons learnt in the WIO Region would particularly be relevant to other regional seas established under the auspices of UNEP.

The project will also document the lessons learnt from various in-country interventions, technical workshops and capacity building works that will be undertaken in a form that facilitates their replication. The project will also actively participate in GEF and other international waters activities that seek to promote replication and sharing of experiences, such as through IW:LEARN and the Biennial GEF IW Conferences. The project will also work closely with other GEF International Waters Projects to be implemented in the WIO region in order to share lessons and experiences on the sustainable approaches of protecting and conserving the coastal and marine ecosystems in the WIO Region. The WIOSAP project will take a lead in establishing a coordination mechanism within the framework of the Nairobi Convention that will bring together other GEF IW projects that will be implemented in the WIO Region. The project will also work with the participating countries to explore modalities of up-scaling pilot in-country interventions at national and regional level.The project would also make use of the Nairobi Convention Clearing House mechanism in replicating specific project activities in other parts of the WIO Region.

3.11 Public awareness, communications and mainstreaming strategy

As part of the overall communications strategy, the project will set up a working archive of successful replicable experiences and "best practices" case studies and learning from negative experience. The project will accumulate a substantial body of knowledge about sustainable, integrated community-based projects that may have a positive effect on regional and global environmental problems. Proven approaches and techniques, and practices to be avoided, would be proactively shared and communicated to interested communities and NGOs and "mainstreamed" within other environment, development and small grant programmes; local and national governments; the UNEP and GEF systems; international environmental NGOs, other practitioners, and other donor agencies.

A key part of the communications strategy of the project is the creative applications of information technology, including the improvement of the Nairobi Convention CHM and national nodes of CHM into an interactive knowledge learning and experience sharing mechanisms. The strengthened CHM will be used for posting of array of educational materials, including the results of the pilot in-country interventions, activities of the Nairobi Convention, including potential sources of additional financing to national projects. The key outputs of the project such as guidelines, methodologies, manuals, assessment reports, policy briefs, thematic reports, among others will also be posted in the CHM. The Nairobi Convention CHM and national nodes of CHM will be improved to permit more efficient and widespread exchange of experiences and lessons learned among country programmes and other interested parties. The CHM will also be supported to improve environment data and knowledge management including maps, graphs, visual imageries, etc. to provide a sound basis for decision-making. The websites will also be used to create public awareness of project activities and achievements. Electronic communications will also help the project management establish links with other projects, programmes and agencies, thus promoting mainstreaming. Audio-visual approaches and materials will also be used for promotional, informational, and training purposes. In complement to the technical communications, the project will provide high-level briefings to RECs and ministerial conferences on marine and coastal affairs and water basin management. Through science-policy fora,

greater linkages will be established between scientists and policy makers allowing exchange of information and improvement of awareness among the policy makers. Engagement of media around key project events from local, national to regional levels would also be promoted to create awareness and increase the visibility of the project.

Allowance will be made within the Project Work Plan to ensure regular communication and or coordination between the Project Office, NCS, UNEP and GEF. UNEP represents the primary international co-ordination centre for the protection of the African coast and the marine environment, respectively from land-based activities. The project management will maintain necessary consultations with other UN and GEF organisations implementing projects in Africa in order to consolidate joint efforts and share experiences. The project would also provide regular updates to participating countries, UNEP and GEF on the progress made in the execution of the project.

3.12 Environmental and social safeguards

The WIOSAP project environmental and social safeguards are informed by GEF Policies on Environmental and Social Safeguards and Gender Mainstreaming. The main objective of the safeguards is to prevent and mitigate any unintended negative impacts to people and the environment that might arise through the implementation of project activities. These safeguards will particularly be important in the selection of in-country interventions. The GEF safeguards will be complimented by the UNEP/GEF checklist for environmental and social safeguards that will be completed as part of ensuring fiduciary standards during the selection of in-country interventions. Checklist will completed during concept development stage to help guide in the identification of possible risks and activities that will be assessed and included in the project design. Checklist and planned mitigation measures will be reviewed annually at PIR stage to ensure that planned mitigation measures are taking place and that previously unanticipated issues are identified and addressed. Checklists and implementation of mitigation measures will be reviewed annually during PIR review, at Mid-term and at Terminal Evaluation stages.

UNEP has policies and systems that comply with all environmental and social safeguards as demonstrated by the UNEP GEF Checklist for environmental and social safeguards. Where the project activities negatively impact on livelihoods, the required safeguard procedures will be implemented by the project with the full participation of the affected communities or persons. The key principles are: (i) avoid negative social impacts and, (ii) if avoiding is not possible, take measures to minimise negative social impacts and where necessary compensate the affected communities. The GEF safeguard policies will mainly be applied in the identification, preparation, and implementation of in-country interventions on wastewater treatment and restoration of degraded critical coastal and marine ecosystems/habitats. In this respect, the project will ensure that environmental and social impact assessments (ESIA) are carried out to ensure that the potential impacts of proposed in-country interventions are identified and mitigated. The project will use a screening process for each proposed demonstration project, as early as possible, to determine the appropriate extent and type of environmental assessment (EA) required so that appropriate studies can be undertaken proportional to potential risks and indirect, cumulative, and associated impacts. As part of the ESIA, the project will determine the potential impacts of the proposed in-country interventions to physical, biological, socioeconomic and physical cultural resources, including transboundary and global concerns, and potential impacts on human health and safety. The project will also ensure assessment of the adequacy of the applicable legal and institutional frameworks.

Priority will be placed on prevention and where it is not possible to prevent, at least minimize, or compensate for adverse impacts and enhance positive impacts through environmental planning and management. The project will also involve stakeholders, including project-affected groups (e.g. indigenous peoples) and local non-governmental organizations (NGOs), as early as possible, in the process of developing in-country interventions and ensure that their views and concerns are made known to decision makers and taken into account in the design and implementation of the project.

The project will also ensure that independent experts are engaged by participating countries in the preparation of ESIA and that independent advisory panels will be used during preparation and implementation of projects that may generate risks, involve contentious issues, or involve serious and multi-dimensional environmental and/or social concerns. The project will also ensure that all viable alternative project designs are considered in order to avoid where feasible, or minimize involuntary resettlement.

The project will also ensure gender equity in the planning and implementation of project activities in each of the participating countries. Deliberate effort will be made to encourage the participation of women and youth in the implementation of in-country interventions including capacity building activities.

Once the project is approved and the project team is in place, project will develop gender guidelines that will apply to the on-the-ground interventions and the project as a whole. They will aim at ensuring gender considerations are always taken into account in the project activities. The guidelines could include:

- Actively seek women's participation in all project actives such as training (both as resource person and participants), working groups and task forces, and ensure that facilitation / chairing of such groups is gender sensitive;
- To the extent possible seek gender representativeness in governance bodies such as the Steering Committee and in appointment of focal points;
- Inclusion of gender awareness in training, guidelines and project proposal templates;
- Involvement of a gender (and social and environmental safeguards) expert in assessment of pilot interventions;
- Have an activity or communications for events such as the International Women's Day;
- Ensure visibility of women (as well as men) on the project website - opinion items, experts profiles, interviews etc.

Further gender sensitivity in the on-the-ground interventions will be a requirement, with particular attention to needs of different groups - e.g. parallel consultation processes at local level to enable women to be heard; to ensure project interventions benefit all groups (in terms of aims and participation).

4 INSTITUTIONAL FRAMEWORK AND IMPLEMENTATION ARRANGEMENTS

4.1 Institutional Framework

The Nairobi Convention Secretariat with the UNEP DEPI functioning as the Implementing Agency will execute the project. The Nairobi Convention Secretariat will establish the Project Management Unit (PMU) to cater for the day-to-day running of the project. The WIOSAP Project Steering Committee whose members will include National Focal Points, representatives of UNEP/DEPI GEF IW, Nairobi Convention and donor organizations, will be established to provide strategic guidance on the implementation of the project. The Steering Committee will meet regularly to review annual work plans and facilitate coordination between the various implementing partners and stakeholders. Representatives of the private sector and civil society will be invited to participate in the WIOSAP Project Steering Committee as observers.

The work of the project will be carried out by national and regional consultants and national and regional organizations, including educational, research, governmental and non-governmental organizations (NGOs) and community-based organizations, among others. This network will work

closely through the National Focal Points to ensure that the governments of participating countries will endorse their work products, but the Nairobi Convention Secretariat and the PMU will retain some independence in naming these institutions to assure a broad representation across the stakeholders. International consultants will be involved in specific activities where capacity in the region is lacking.

The development of the WIOSAP was a participatory process demonstrating the broad commitment of the governments in the WIO region. During the implementation, governments will be directly involved in the regionally co-ordinated activities through the participation of national institutions and experts in activities planned under this project. The private sector will also be actively involved in the project where necessary. The Project through the Nairobi Convention Secretariat will work with the participating countries and key private sector actors to identify and engage the private sector in the appropriate project activities.

4.2 Implementing Agency Arrangements

UNEP/DEPI, as the Implementing Agency, will be responsible for overall project supervision to ensure consistency with GEF and UNEP policies and procedures, will provide guidance on linkages with related UNEP and GEF-funded activities, monitor implementation of the project activities and will clear and transmit the financial and progress reports to GEF. The project financial and administrative support will be provided by UNEP and UNON.

More specifically, UNEP/DEPI will be responsible for:

i) Managing and disbursing allocated funds from GEF in accordance with the rules and procedures of UNEP;
ii) Overseeing and monitoring project implementation in accordance with the project document, and the approved work plans and budgets;
iii) Report to the GEF Secretariat and Evaluation Office, through the annual Project Implementation Review (PIR), on project progress;
iv) Providing annual financial reports to the GEF Trustee in accordance with the financial procedures agreement between UNEP and the GEF, and, in collaboration with the UNEP/GEF IW Unit, call for project funds on a six-monthly basis from the GEF Trustee;
v) Organizing external/independent mid-term and terminal project evaluations and submitting their reports to the GEF Evaluation Office and GEF Secretariat; and
vi) Providing the linkages with major international conventions and international environmental conservation networks and fora.

4.3 Executing Agency Arrangements

The Project will be executed by the Nairobi Convention Secretariat. The Secretariat will execute the project and also provide technical support including hiring and administration of international and local personnel, procurement of goods and services, travel arrangements and other miscellaneous support as required by the PMU in consultation with UNEP.

4.4 Management and Administrative Structure

The management and administrative structure for the project shall consist of the following elements: Executing Agency, Project Steering Committee (PSC), and Project Management Unit based at the Nairobi Convention Secretariat in Nairobi, Kenya (see appendix 11).

The Project Manager shall be responsible for presenting reports on project implementation to the Steering Committee as well as to the Nairobi Convention Secretariat. The progress reports including annual work plan and budget shall be approved by the Project Steering Committee during its formal sittings and the approval granted shall be minuted in the reports of meetings of the committee. The reports shall be circulated to participating countries and also posted in the Nairobi Convention CHM.

4.5 Project Management Unit

The management and coordination of the WIOSAP project is informed by the experiences gained during the implementation of the WIO-LaB Project in the period between 2004 and 2010. The project will therefore consolidate experiences and lessons learnt in the implementation of the WIO-LaB Project. The WIOSAP Project Management Unit (PMU) will be established in the Nairobi Convention Secretariat. This will allow the project management team to interact with both executing partners including the already established network in the WIO region. The key staff at the WIOSAP PMU will include the Project Manager, Scientific/Technical Officer, Policy/Governance Officer and an Administrative/Financial Assistant. While the procurement process (preparation of announcements, TORs and selection of service providers, etc.) will be under PMU, the contracting of service providers will be responsibility of the Executing Agency. The PMU will work in partnership with a number of key organizations, including but not limited to the WIO-C. Project supervision and other implementing agency roles will be fulfilled by the UNEP/ DEPI IW unit.

At the national level, the participating countries will appoint WIOSAP Project National Project Coordinators who will, working with Nairobi Convention National Focal Points, oversee the implementation of various project activities at national level. The WIOSAP National Project Coordinators will liaise closely with the Nairobi Convention National Focal Points in order to facilitate linkages with the established national processes that would be instrumental in the delivery of the project at national level. The specific activities would be undertaken by the national technical working groups or task forces and the inter-ministerial committees that would be established in participating countries, particularly those that are already operating under the auspices of the Nairobi Convention. Similar technical working groups would be established at regional level in addition to those already established within the framework of the Nairobi Convention, such as PADH Task Force, Legal and Technical Review Task Force, among others. Detailed descriptions of these Task Forces are presented in Appendices 13, 14 and 15.

The implementation of the project will take place through a network of national institutions that are responsible for various activities, operating according to a common work plan to be approved by the Project Steering Committee. The PMU will be responsible for the day to day management of project activities including linkages with the National Focal Points, national and international partners, among others.

The PMU will be integrated into the Nairobi Convention Secretariat to ensure long-term sustainability of project activities and outcomes. The PMU will report to the Nairobi Convention Secretariat and ultimately to the UNEP/DEPI GEF IW unit. All activities under the project will be carried out in cooperation with Governments, international organizations, the National Focal Points for the Nairobi Convention and other GEF IW Projects, NGO's and national and international consultants. The project will cover related personnel costs of staff of the PMU at the Nairobi Convention Secretariat including the costs of the activities as detailed in the project document.

The Project Assurance role is the responsibility of the UNEP/GEF Task Manager in UNEP/DEPI who will support the Project Steering Committee by carrying out objective and independent project oversight and monitoring functions. The Project Manager will have the authority to run the project on a day-to-day basis with guidance provided by the Project Steering Committee. The Project Manager's prime responsibility is to ensure that the project produces the results specified in the WIOSAP project document, to the required standard of quality and within the specified constraints of time and cost.

It is the responsibility of the Project Manager to inform the Executing Agency any delays or difficulties faced during implementation of the project activities so that the appropriate corrective measures are put in place immediately.

Funds will be disbursed directly for activities under direct responsibilities of PMU e.g. capacity building activities, however, for those activities implemented by government institutions and partners at regional and national levels, disbursement of funds to contractors will be direct to contractors but after the PMU has certified that all contractual obligations are met as per contract with the Executing Agency.

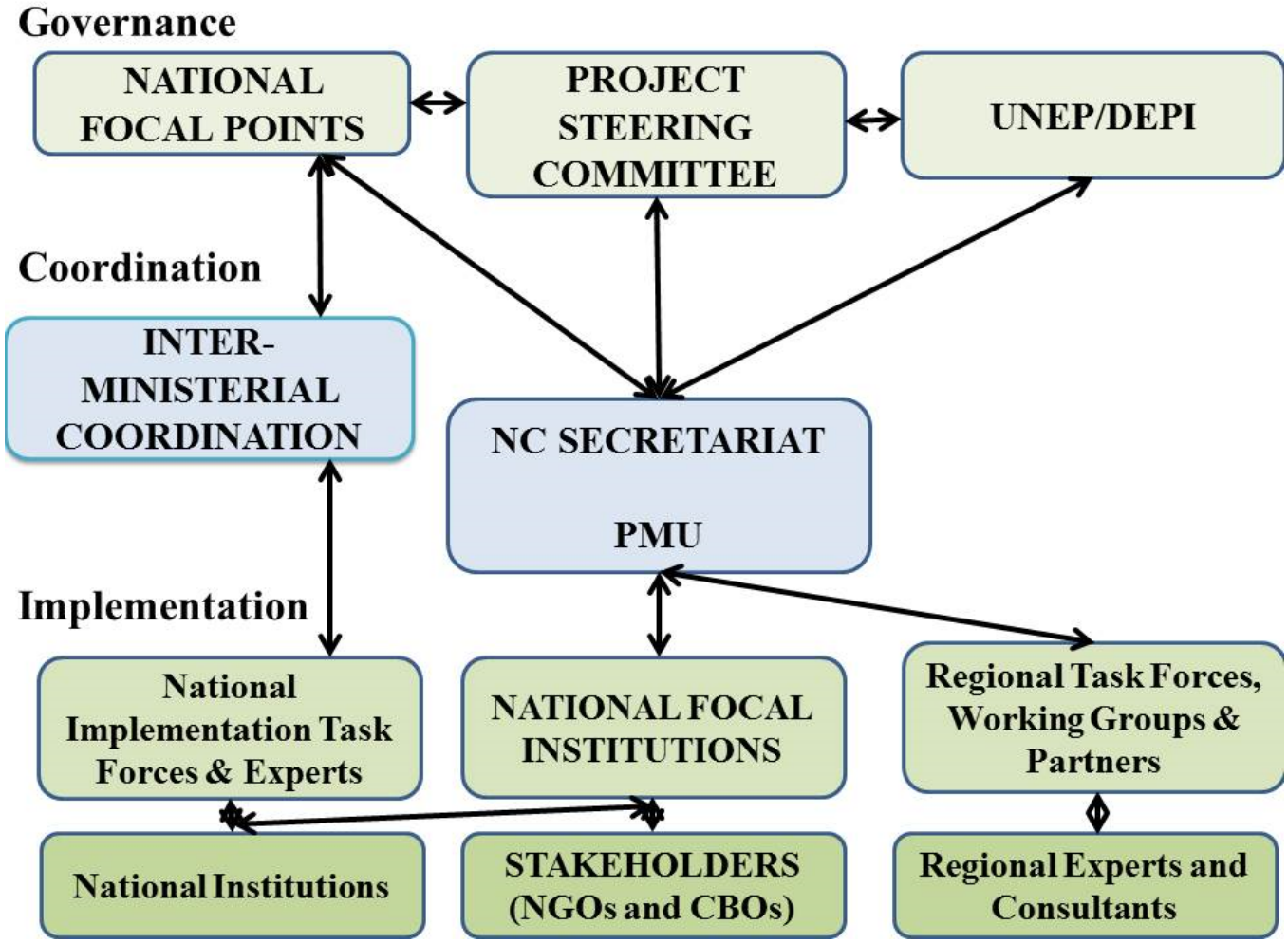
4.6 Steering Committee and national coordination

The WIOSAP Project Steering Committee (PSC) whose membership shall consists of the representatives of the participating countries (National Focal Points), UNEP/DEPI and donors, will be responsible for providing guidance to the project and also making management decisions for the project. In view of its project executing role, the Nairobi Convention Secretariat shall serve as a secretariat of the Steering Committee. The WIO-C, COI and other economic commissions such as SADC will also be invited as observers. Chairs of Task Forces and Working groups will also be observers in the Committees meetings. The Project Steering Committee will also play a critical role in the monitoring and evaluation of the project and make sure that the results of evaluations are used for performance improvement, accountability and learning. The steering committee will also be responsible for approving strategic decisions and annual work plans, setting project direction, reviewing progress of the project, and identifying additional funding for the implementation of the project. PSC meetings will normally be open to recognized stakeholders on an observer basis, except where personnel or other sensitive matters are under discussion.

The Steering Committee will also provide policy-level liaison to national governments, through Inter-Ministerial Coordination Committees, in connection with the implementation of the project at country level. The Steering Committee will be chaired by a senior government official for a term not exceeding one year who will be elected by the participating countries. The Project Manager will serve as the Secretary to the Steering Committee. The decisions of the Project Steering Committee will be reached by consensus by the members.

Each of the participating country will build on existing or establish an Inter-Ministerial Coordination Committee or similar national inter-agency mechanism, facilitated by the Nairobi Convention National Focal Points, to help assure effective coordination and communication amongst all ministries during the implementation of the project at country level. The Nairobi Convention National Focal Points (NFP) will establish coordination mechanisms and help assure intersectoral coordination within their countries, as part of their effort to ensure sustainability of the project activities and outcomes.

Institutional arrangements and coordination



5 STAKEHOLDER PARTICIPATION

The preparation of the WIOSAP Project involved extensive stakeholder's consultations at both national and regional levels. In the following sections, details are provided on the stakeholder consultation processes during project design and also the envisaged stakeholders' participation during the implementation of the project.

5.1 Stakeholder participation during the project design phase

The development of the WIOSAP Project started under the auspices of the WIO-LaB Project in which the process of preparing the SAP that forms the basis of this project was undertaken. Under the WIO-LaB project, a series of consultative meetings were held in each of the participating countries. The exception was in the case of Somalia and France Reunion who were technical not members of the WIO-LaB Project. However, the representatives of the two countries were involved in the meetings of the project Steering Committee as observers. The process for the formulation of the SAP was led by a Team of Experts established under the auspices of the Nairobi Convention. The SAP Drafting Team consisted of experts and stakeholders drawn from governments, civil society, and academic institutions in the WIO region. The SAP Drafting Team first met in Mombasa, Kenya in August 2008, to draft the vision, long-term objectives, short-term management targets and actions for the SAP.

The draft SAP emanating from Mombasa was later presented to the Regional Task Forces on Municipal Wastewater Management and Physical Alteration and Destruction of Habitats, during the 4th regional task force meeting that was held in Nampula, Mozambique, from 22nd to 24th October 2008. The outcome of this review meeting was a more consolidated draft SAP with clearly articulated environmental quality objectives and specific management targets and actions based on the inputs provided by the participating countries.

In period between 20th and 21st November 2008, the draft SAP that emanated from Nampula was presented to stakeholders in the WIO Region in a Regional SAP Stakeholder's Workshop that was held in Cape Town, South Africa. During this workshop, stakeholders drawn from both governmental and non-governmental organizations further reviewed the vision, environmental quality objectives as well as various management targets and actions. The meeting also identified stakeholders to be involved in the implementation of the various management actions articulated in the SAP. Further deliberations and negotiations on the draft SAP were held during the WIO-LaB project Steering Committee meeting and the Nairobi Convention Focal Points Forum held in Seychelles on 11th and 12th March 2009.

In the period between January and December 2009, national consultative workshops on the SAP were held in each of the participating countries. During these meetings, national stakeholders in participating countries provided inputs on priority actions to be implemented at the national level. The meetings also identified key national stakeholders that would be involved in the implementation of the SAP at national level, as well as ongoing and planned projects and programmes that would contribute to its implementation.

Final technical negotiations on the WIO-LaB SAP were held during the 2nd Regional Stakeholder's Workshop that was held on 11th and 12th June 2009 in Mombasa, Kenya. These negotiation meetings were attended by officially nominated Government delegates, as well as representatives of key partner institutions and organisations in the region. Following the Mombasa negotiation meeting, the updated SAP was subsequently presented to the WIO-LaB Project Steering Committee on 7th December 2009 for endorsement. Following the endorsement by the Steering Committee, the final

version of the SAP was submitted to the 6th Conference of Parties of the Nairobi Convention in April 2010 for final endorsement by the governments of the participating countries.

During the 6th Conference of Parties to the Nairobi Convention held in April 2010, the Contracting Parties adopted and signed the LBSA Protocol and endorsed the WIO-SAP document. In decision CP6/1 on "Implementing the Work Programme and Budget 2008-2011", the Contracting Parties requested the Nairobi Convention Secretariat to initiate and facilitate the development and implementation of the follow-up projects identified in the SAP, and seek new funding opportunities for the projects. In 2012, UNEP developed and submitted a Project Identification Form (PIF) to GEF for a proposed project entitled "Implementation of the Strategic Action Programme for the protection of the Western Indian Ocean from land-based sources and activities". The PIF was approved by the GEF Council on 12 April 2013 for USD 10,867,000. The PIF funding was used by UNEP/Nairobi Convention to hold further consultative meetings with the key stakeholders in the region. The output of these consultative meetings was further consolidation of stakeholder's commitment to the project and also refinement of project activities as detailed in this project document.

5.2 Stakeholder participation during project implementation phase

The WIOSAP PMU will update the Stakeholder's Participation Plan that was developed during the implementation of the WIO-LaB Project by bringing on board other key stakeholders that are important in the realization of the goals of the project. The updated plan will be presented to the Project Steering Committee for approval. The potential partners of the project in each of the participating countries shown in Table 11 below. Appendix 24 shows the main stakeholders to be involved in the implementation of specific activities of the project.

During the implementation of the WIOSAP project, the Nairobi Convention Secretariat will take the lead in ensuring linkages with key partners in the WIO Region such as the various organisations that are members of the Consortium for Conservation of Coastal and Marine Ecosystems in the Western Indian Ocean (WIO-C), namely BirdLife International, the International Union for the Conservation of Nature (IUCN), the Western Indian Ocean Marine Sciences Association (WIOMSA), and the World Wide Fund for Nature (WWF), among others. Other partners will be brought on board on the basis of their core competencies and comparative advantages. These partners include the Indian Ocean Commission, UNESCO-IOC, FAO EAF, the Natural Resources Programme under UNEP's Regional Office for Africa; the joint UNDP-UNEP Poverty Environment Initiative for Africa; the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA), and the Programme of Action for the Sustainable Development in Small Island Developing States.

During the implementation of the project, the aim will be to ensure full participation by a diverse range of stakeholders in order to consolidate various partnerships for the implementation of the WIO-SAP through targeted in-country interventions and activities and governance processes. The project will engage with partners in the WIO Region that are already addressing issues that are relevant to the attainment of the main objective of this project.

Local communities and authorities, NGOs, private sector and technical services from various other ministries besides those responsible for environment and water resources, will be involved in the development and implementation of in-country interventions and the implementation of specific WIO-SAP activities such as the restoration of degraded critical ecosystems/habitats in key hotspot areas in the WIO region. To ensure ownership, local communities and CSOs/CBOs will be involved in the design, implementation and monitoring of the relevant in-country interventions. Particular emphasis will be given to the socio-economic dimension and gender sensitivity with extensive participation of the affected communities or persons in the interventions. Output A.2.4 will specifically link communities and CSOs to demonstration initiatives. The project has adopted the

'bottom-up approach' so that the experiences gained at the local level during the implementation of in-country interventions, can inform to national and regional management and policy.

Coastal and marine resource managers in participating countries are expected to play an importannt role in the coordination of project activities at the national level including also faciliatation of data-sharing within the project. They would support national and regional decision making processes and monitor project progress at national and regional levels. The project will provide support to resource managers so that thay can most effectively ensure linkages with the national implementation committees and national interministerial committees, respectively. The development of tools and implementation of in-country interventions will not only benefit the resource managers and resource users, but also other partners who are concerned with management of the region's coastal and marine resources.

Table 11: Potential Partners to be involved in the implementation of the WIOSAP Project.

Country	Potential Project Partners
Kenya	Ministry of Environment, Water and Natural Resources Kenya Marine and Fisheries Research Institute (KMFRI) National Environmental Management Authority (NEMA) Kenya Wildlife Serve (KWS) Government Chemist Department Water Resources Management Authority (WARMA) East African Wildlife Society (EAWS) Wetlands International BirdLife Africa Partnership Coastal and Ocean Research and Development in the Indian Ocean (CORDIO)- East Africa IUCN Regional Office for Eastern & Southern Africa South Eastern Kenya University–School of Water Resources Science and Technology. University of Nairobi - Department of Geography and Environmental Department of Remote-Sensing and Resource Surveys. School of Law. Attorney General's Office-Legislative Drafting Department Coast Water Services Board/Coast Water and Sewerage Company. Coast Development Authority (CDA) Tana and Athi Rivers Development Authority (TARDA)
Tanzania	National Environment Management Council (NEMC) Western Indian Ocean Marine Science Association (WIOMSA) WWF Eastern Africa Regional Programme Office University of Dar es Salaam/Institute of Marine Sciences (IMS) Tanzania Coastal Management Partnership (TCMP) Pollution Control, Department of Environment-Zanzibar Department of Environment, Tanzania Rufiji River Basin Development Authority (RUBADA)
Mozambique	Ministry for the Coordination Environmental Affairs (MICOA) Eduardo Mondlane University-UEM Endangered Wildlife Trust (NGO) National Directorate of Environmental Management (Government agency) National Remote Sensing & Cartography Centre (CENECARTA) National Laboratory for Food and Water Safety (LNHAA) Centre for sustainable Development for coastal zones, Mozambique Inkomati Catchment Management Agency (ICMA)

South Africa	Department of Environmental Affairs & Tourism (Marine and Fisheries) Oceanographic Research Institute (ORI) Southern African Data Centre for Oceanography/Institute for Maritime Technology. University of Cape Town-Institute of Marine and Environmental Law Southern African Institute for Environmental Assessment Council For Scientific & Industrial Research (CSIR) Breede/Overberg Catchment Management Agency (BOCMA) Komati Basin Water Authority (KOBWA)
Comoros	Ministère de l'Agriculture, de la Pêche et de l'Environnement Institut National de Recherché pour l'Agriculture, la Pêche et l'Environnement (INRAPE) Système d'Information Géographique et Aide à la Prise de Décision Chef de service réglementation et contrôle à la Direction Nationale de l'environnement. Direction Nationale de l'environnement. Direction General de l'Environnement.
Mauritius	Ministry of Environment and National Development Unit Ministry of Fisheries Attorney General's Office and Ministry of Justice & Human Rights Mauritius Oceanography Institute (MOI) Central Water Authority University of Mauritius National Parks and Conservation Service Wastewater Management Authority Albion Fisheries Research Centre.
Seychelles	Department of Environment Ministry of Environment, Natural Resources and Transport Centre for GIS-Ministry of Land Use and Habitat
France Reunion	Direction générale de la Mondialisation, du Développement et des Partenariats Ministry of Environment International Affairs (Biodiversity and Regional Seas) Direction de l'Eau et de la Biodiversité - Mission Internationale et Communautaire.
Madagascar	Ministry of Environment and Forests Conservation et des documents fonciers Service des Domaines, Madagascar Association Nationale pour la Gestion des Aires Protégées (ANGAP) Blue Ventures (NGO) Conservation Centrée sur la Communauté Madagascar Sahamalaza Community Based Conservation Wildlife Conservation Society (NGO) Office National pour l'Environnement (ONE) Centre National de Recherches sur l'Environnement (CNRE) Centre National de Recherches Océanographiques (CNRO) Institut Halieutique et des Sciences Marines (IHSM) Direction de l'environnement et de la technologie (Ministère de l'Industrie)
UNEP	UNEP-Nairobi Convention Secretariat UNEP-Division of Environment Policy Implementation UNEP-GPA Coordination Office UNEP-Regional Seas Programme
Regional IGO	IOC, SADC, IGAD, EAC, AU, NEPAD
International/Regional NGOs	WWF-Eastern Africa Regional Programme Office. IUCN- Eastern and Southern Africa Regional Office. Western Indian Ocean Marine Science Association (WIOMSA)

6 MONITORING AND EVALUATION PLAN

The monitoring and evaluation of progress in the implementation of the WIOSAP will be guided by the specific results-based indicators that will form part of the M&E Plan (see Appendix8). The project will follow UNEP's standard monitoring and evaluation procedures. The Project's Results Framework presented in Appendix 4 includes SMART indicators for each expected outcome and mid-term and end-of-project targets. These indicators along with the key deliverables and benchmarks will be the main tools for assessing project implementation progress. The means of verification are summarized in the log frame. M&E related costs are presented in the costed M&E Plan. These costs are integrated in the overall budget of the project.

The M&E plan will be reviewed and revised as it may be necessary during the project inception workshop to ensure project stakeholders understand their roles and responsibilities in project monitoring and evaluation. Indicators and their means of verification may also be fine-tuned at the inception workshop. Day-to-day project monitoring will be the responsibility of the project management team but other project partners will be expected to collect specific information to track the indicators.

6.1 Project Monitoring and Evaluation Activities

Monitoring and evaluation includes a series of linked activities, including a complete WIOSAP project document, annual project reports, mid-term evaluation and terminal evaluation. Monitoring and evaluation begun with preparation of this project document, complete with logical framework matrix (Logframe) developed according to standard M&E procedures. This Project Document includes the required Logframe Matrix with progress indicators and means of verification. Baseline data gaps for M&E will be addressed during the first year of project implementation. A plan for collecting the necessary baseline data will be developed by the WIOSAP Project Manager. In parallel, at the national level, the ecosystem vulnerability assessments, environmental flow assessments, and monitoring of the water quality will create a baseline with expanding coverage.

A project inception workshop will be held at the beginning of project implementation, preferably within the first 3 months. The participants in the inception workshop will include partners and agencies that are assigned roles in the project organisational structure including also the representatives of the participating countries, UNEP/DEPI GEF IW and Nairobi Convention Secretariat. The inception workshop will consolidate the regional ownership of the project and approve of the first year annual work plan, the draft of which will be prepared by the WIOSAP PMU. The inception workshop report is a key reference document which will be prepared and shared with participants within two weeks of the workshop to formalize various agreements and plans agreed during the meeting.

The objectives of the inception workshop are as follows:

- Create awareness among the project partners on the various components and activities of the project including modalities of implementing them.
- Discuss and agree on the roles and responsibilities of various project partners including agencies that will provide support services.
- Discuss and agree on the project's decision-making structures, including reporting and conflict resolution mechanisms.
- Discuss roles and responsibilities for monitoring and evaluation of project progress including baseline data needs.
- Recommend the budget and work plan for the first year of implementation.
- Create awareness on the financial reporting procedures and obligations, and arrangements for annual audit as set out in this project document.

The first Project Steering Committee (PSC) meeting will be held back-to-back with the Inception Workshop. Among the important actions of the PSC is to discuss and approve the roles and responsibilities of all project organisational structures and the first Annual Work Plan and Budget. The PSC will receive periodic reports on progress made by the project and will make recommendations to UNEP concerning the need to revise any aspects of the Results Framework or the M&E plan.

Project oversight to ensure that the project meets UNEP and GEF policies and procedures is the responsibility to the Task Manager in UNEP/DEPI GEF IW. The Task Manager will also review the quality of draft project outputs, provide feedback to the project partners, and establish peer review procedures to ensure adequate quality of scientific and technical outputs. Project supervision will take an adaptive management approach. The Task Manager will develop a project supervision plan at the inception of the project which will be communicated to the project partners during the inception workshop. The project supervision plan will focus on the outcome monitoring including also project financial management. Project risks and assumptions will be regularly monitored both by project partners and UNEP/DEPI GEF IW, since risk assessment will be an integral part of the Project Implementation Review (PIR). The quality of project monitoring and evaluation will also be reviewed and rated as part of the PIR. Key financial parameters will be monitored quarterly to ensure cost-effective use of financial resources.

Half-Yearly Progress Reports: These will be prepared by the PMU and will be assessed based on the projects Results Based Framework. The detailed half-yearly reports will be prepared by the Project Manager and submitted to the PSC and to UNEP/ GEF Coordination Office covering the periods 30thJune and 31stDecember of each year of implementation. The reports will include a summary of progress made since the previous biannual report and provide details of any unforeseen impediments to project implementation. The report will also include up-to-date financial information on the expenditure of project funds. These reports will be reviewed, amended as required and approved by the PSC as part of the record of their meetings.

Project Implementation Review (PIR): The PIR will be prepared by the Project Manager to monitor progress made since the commencement of the project implementation and in particular for the previous reporting period (30thJune to 1stJuly). The PIR will combine both UNEP and GEF reporting requirements. The PIR report will includes details on the progress made toward realisation of project objectives and project outcomes, project outputs delivered per project outcome, lessons learned in the implementation of the project, financial expenditure report, risk and adaptive management, among others.

Annual Project Report (APR): This report will be prepared by the Project Manager in consultation with the relevant Stakeholders and will be submitted to UNEP/DEPI and Nairobi Convention Secretariat. The report will enable the partners of the project to obtain information on the performance of the project with regard to the implementation of agreed activities. The APR will also provide details on the project achievements, initial evidence of success, including constraints in the implementation of agreed activities and how those constraints/shortcomings will be addressed in subsequent years. The report will also include a compilation of lessons learned and financial expenditure statement. The review of APR will be based the logical framework matrix and the agreed performance indicators.

Mid-Term Evaluation (MTE): The project will undergo an independent Mid-Term Evaluation at the mid-point of project implementation, preferably by June 2018. The mid-term evaluation will take place as indicated in the project milestones. The mid-term project evaluation will focuses on relevance, performance (effectiveness, efficiency and timeliness), issues requiring decisions and actions and initial lessons learned on the project design, implementation and management. The evaluation will also include all parameters recommended by the GEF Evaluation Office for mid-term evaluations and will verify information gathered through the GEF tracking tools, as relevant. The

evaluation will be carried out using a participatory approach - parties that benefit or are affected by the project will be consulted. Such parties were identified during the stakeholder analysis. The project Steering Committee through the Nairobi Convention National Focal Points and other stakeholders will participate in the mid-term evaluation of the project. The Project Manager will prepare a management response to the mid-term evaluation recommendations along with a plan for effecting the required changes in project implementation. The UNEP/DEPI Task Manager will have the responsibility of monitoring the implementation of agreed recommendations. The Terms of Reference for the Mid-term review will be prepared by the UNEP/DEPI Task Manager in consultation with the Nairobi Convention Secretariat and the Project Management. The recruitment of a consultant to carry out mid-term evaluation will be undertaken by UNEP Evaluation and Oversight Unit (EOU).

Terminal Evaluation (TE): An independent final evaluation will take place at least six (6) months prior to the final Project Steering Committee meeting. This terminal evaluation will be undertaken in accordance with UNEP and GEF procedures and will focus on the same issues as the mid-term evaluation but in addition it will also examine the early evidence of project impact and sustainability of results, including the contribution to capacity building and the achievement of global environmental benefits. GEF Tracking Tools will also be compiled before the Terminal Evaluation and entries verified by the consultant. The terminal evaluation will focus on the delivery of the project's outputs and outcomes detailed in the project document and as amended following the mid-term evaluation. The final evaluation will assess the impact and sustainability of results, including contribution to capacity building in the WIO region including also the achievement of global environmental benefits. The Terms of Reference for this evaluation will be prepared by the UNEP/ GEF Coordination Office based on guidance from the Project Management Unit and Nairobi Convention Secretariat. The Terminal Evaluation will also provide recommendations for follow-up activities. The management response to issues raised in the terminal evaluation will be prepared by the Project Manager in consultation with the Nairobi Convention Secretariat and National Focal Points. The Evaluation and Oversight Unit (EOU) of UNEP will manage the terminal evaluation process. The review of the quality of the evaluation report will be done by UNEP's EOU who will subsequently submit the report to the GEF Evaluation Office not later than 6 months after the completion of the terminal evaluation. The standard terms of reference for the terminal evaluation are included in Appendix 10.

Project Terminal Report (PTR): This report will be prepared by the project management unit during the last three months of the project. This report will provide details on the achieved results (outcomes and outputs), lessons learnt, problems/constraints experienced and specific areas where results may not have been achieved. It will also provide recommendations on measures that should be put in place to ensure sustainability and replication of the project's results. The follow-up will be the responsibility of the Nairobi Convention Secretariat to ensure long-term sustainability of project results.

Project Implementation Review (PIR): The WIOSAP project will need to participate in the GEF Project Implementation Review (PIR) process. The PIR is mandatory for all GEF projects that have been under implementation for at least a year at the time that the exercise is conducted. The PIR will be carried out between June and September of each year of implementation. It will contain sections on basic project data, financial status, procurement data, impact achievement and progress in project implementation. The basic outline will follow the structure of the Logframe with indicators assigned to objectives, means of verification, and assumptions. The PIR questionnaire is sent to the Project Manager, usually around the beginning of June of each year. Project Manager will have on average 1.5- 2 months to collect the necessary information, and submit PIR to UNEP/ GEF Coordination Office.

Table 12: Monitoring and evaluation activities, timeframes and responsibilities

Activity	Responsibilities	Timeframes
Half Yearly Progress Report (HYPR)	Project Manager in consultation with Project stakeholders	every six month (by 30thJune and 31st December of each year)
Annual Project Report (APR)	Project Manager in consultation with Project stakeholders	Annually
Project Implementation Review (PIR)	Project Manager, Nairobi Convention Secretariat, UNEP/DEPI, Project Team, UNEPGEF Coordination Office	Annually, between June and September of each year
Mid-Term Evaluation (MTE)	Project Manager, Nairobi Convention Secretariat, UNEP/DEPI, UNEP's Evaluation and Oversight Unit (EOU)	Mid-point of the project implementation period
Terminal Evaluation (TE)	Project Manager, Nairobi Convention Secretariat, UNEP/DEPI, UNEP's Evaluation and Oversight Unit (EOU)	At least six months before the end of project
Financial Reporting	Project Manager and UNEP Financial Management Officer	31stMarch, 30th June, 30th September, 31st December of each year
Periodic Site Visits (PSV)	Project Manager, Nairobi Convention Secretariat, UNEP/DEPI and National Focal Points, as it may be necessary.	Annually

Periodic Site Visits (PSV): UNEP/DEPI, Nairobi Convention Secretariat and WIOSAP PMU staff will conduct periodic visits to project sites in participating countries based on the schedule that will be agreed during the project's inception workshop and subsequent Project Steering Committee meetings. These periods will be factored in the annual Work Plans of the project. The purpose of site visits will be to assess the progress in the implementation of specific project activities in the field, such as those on the in-country interventions. Other members of the Project Steering Committee may be invited to join these visits as may be appropriate. A field visit report will be prepared by the Project Manager within a period of one month after the visit to the field. The Audit Service may also undertake ad hoc site visits.

6.2 Financial Reports

Financial reports shall be prepared by UNEP Fund Management Officer in accordance with the standard accounting procedures:

i) Details of expenditures shall be reported on an activity-by-activity basis, in line with Project's budget codes as set out in the Project Document, as at 31stMarch, 30thJune, 30thSeptember and 31st December of each calendar year, using the standard format. All expenditure accounts shall be dispatched by the Project Manager to UNEP/DEPI within 30 days of the end of the three-month period, to which they refer, certified by the duly authorized official and the Project Manager.

ii) The expenditure account as at 31stDecember of the calendar year is to be received by UNEP/DEPI by 15th of February of each calendar year.

iii) A final statement of account must be in line with UNEP project budget codes, reflecting actual final expenditures under the project, when all obligations have been liquidated.

iv) Any portion of cash advances remaining unspent or uncommitted by the Project Manager at the end of the Project shall be reimbursed to UNEP/DEPI within one month of submission of the final statement of accounts. In the event that there is any delay in such

disbursement, the Nairobi Convention Secretariat shall be financially responsible for any adverse movement in the foreign exchange rates.

The Nairobi Convention Secretariat shall retain for a period of three years, all supporting documents relating to financial transactions under the Project. If requested, the Nairobi Convention Secretariat shall facilitate an audit by the United Nations Board of Auditors and/or the Audit Service of the accounts of the Project.

6.3 Co-Financing Report

A report on co-financing will be completed as of 31st December of each year using the standard format to be provided by UNEP/DEPI.

6.4 Procurement

Procurement will be done in accordance with UNEP procurement procedures. The WIOSAP Project Manager in close collaboration with the UNEP Funds Management Officer, will procure the equipment and services indicated in the procurement Plan (see Appendix 21), in accordance with the approved annual work plan and UNEP's procurement rules and regulations.

7 PROJECT FINANCING AND BUDGET

7.1 Overall Project Budget

Project Component, Target and Activity.	GEF Funding (US$)	Co-Funding (US$)	Total (US$)
COMPONENT A: SUSTAINABLE MANAGEMENT OF CRITICAL HABITATS			
Outcome A.1: Critical habitats management			
OUTPUT A.1.1: Spatial plans			
Activity A.1.1.1 Development of marine spatial plans for at least 5 priority sites and associated capacity building	600,000	4,933,263	5,533,263
OUTPUT A.1.2: Management plans			
Activity A.1.2.1. Development of management plans (3 sites representative habitats)	750,000	2,912,227	3,662,227
OUTPUT A.1.3: Critical habitats restoration			
Activity: A.1.3.1. Restoration of critical habitats (1 site)	300,000	4,013,163	4,313,163
Activity A.1.3.2. Development of guidelines for restoration of critical habitats	100,000	2,566,156	2,666,156
OUTPUT A.1.4: Demonstration on ICM			
Activities: A.1.4.1. Support up-scaling and replication of ICM and associated capacity building (3 priority sites)	900,000	11,441,168	12,341,168
Sub-total Outcome A.1:	2,650,000	25,865,977	28,515,977
OUTCOME A.2: Appropriate tools and methods support coastal planning and management			
OUTPUT A.2.1: Critical Ecosystems Economic Valuation			
Activities: A.2.1.1 Application of economic valuation methodologies (2 sites)	300,000	3,385,287	3,685,287
OUTPUT A.2.2: Tools and guidelines for vulnerability assessment and spatial planning			
Activity: A.2.2.1. Adaptation of tools and guidelines for vulnerability assessment	100, 000	2,436,236	2,536,236
OUTPUT A.2.3: Sustainable livelihood strategies			

Activity: A.2.3.1. Development of extractive use strategies for resources in critical areas	150,000	2,581,333	2,731,333
OUTPUT A.2.4 Regional indicators of critical ecosystems and baseline assessment			
Activity A.2.4.1. Development of key indicators for assessing effectiveness of management and monitoring	138,000	2,013,373	2,151,373
Activity A.2.4.2. Establishment of national modalities for monitoring the state of critical habitats	150,000	4,047,337	4,197,337
Sub-total Outcome A.2:	838,000	14,463,566	15,301,566
Sub-total Component A:	**3,488,000**	**40,329,543**	**43,817,543**
COMPONENT B: IMPROVED WATER QUALITY			
OUTCOME B.1: Quality of coastal receiving waters improved through pilot interventions			
OUTPUT B.1.1: Demonstration of technologies for wastewater and effluent treatment			
Activity: B.1.1.1 Identification and implementation of wastewater management in-country interventions in at least three (3) priority sites	800,000	8,294,162	9,094,162
OUTPUT B.2.1: Effluents treatment in demonstration sites			
Activity: B.1.2.1. Implementation of effluent reduction measures (1 priority site)	400,000	1,917,415	2,317,415
OUTPUT B.1.3: Capacity building on water quality management			
Activity: B.1.3.1. Programmes and actions for empowering communities on water quality management (4 countries)	400,000	821,383	1,221,383
Sub-total Outcome B.1:	1,600,000	11,032,960	12,632,960
OUTCOME B.2 Regulatory Framework for monitoring and management of pollutant loads, effluents and receiving water quality adopted at regional level			
Activities: B.2.1.1. Review and development of regional standards, regulations and processes for wastewater monitoring (linked to B 2.3.1)	150,000	834,300	984,300
OUTPUT B.2.2: Adoption of regional standards and monitoring framework			
Activities: B.2.2.1. Development and implementation of water quality monitoring framework (3 countries)	450,000	3,534,405	3,984,405
OUTPUT B.2.3 Regulatory and human capacity of national and regional institutions			
Activity: B.2.3.1. Capacity building for implementation of regional standards and effective wastewater monitoring process	110,000	983,335	1,093,335
Sub-total Outcome B.2:	710,000	5,352,040	6,062,040
Sub-total Component B:	2,310,000	16,385,000	18,695,000
COMPONENT C: SUSTAINABLE MANAGEMENT OF RIVER FLOWS			
OUTCOME C.1: Environmental Flow Assessments (EFAs)			
OUTPUT C.1.1: Environmental flow assessments			
Activity: C.1.1.1. Identification and supporting the conducting of EFA in two selected basins	400,000	5,158,047	5,558,047
OUTPUT C.1.2: Implementation of flow assessment recommendations			
Activity: C.1.2.1. Development and implementation of environmental flow management plans (2 sub-basins)	300,000	5,391,158	5,691,158
OUTPUT C.2.1: Implementation Environmental Flow Assessment plans			
Activity: C.2.1.1 Preparation of regional guidelines on EFA and capacity building for EFA at national and regional levels	175,000	3,802,936	3,977,936
Activity C.2.1.2. Pilot development of an institutional and regulatory framework for conjunctive river basin-coastal area management (1 priority site)	300,000	2,647,800	2,947,800
Sub-total Outcome C.2:	1,175,000	16,999,941	18,174,941
Sub-total Component C:	1,175,000	16,999,941	18,174,941
COMPONENT D: GOVERNANCE AND REGIONAL COLLABORATION			

OUTCOME D.1 Updated policies and strong institutions underpin WIO-SAP implementation			
OUTPUT D.1.1: Development and adoption of ICZM protocol			
Activity: D.1.1.1 Finalization and implementation of the ICZM protocol at national level	150,000	585,181	735,181
Activity D.1.1.2. Capacity building for ICZM protocol implementation (linked to A.1.4.1)	0	0	0
OUTPUT D.1.2: Ratification of LBSA protocol			
Activity: D.1.2.1. Support country processes for ratification of the LBSA protocol	100,000	437,003	537,003
Activity: D.1.2.2. Build national capacity for implementation of LBSA Protocol (linked to B. 2.3.1)	0	0	0
OUTPUT D.1.3: Implementation of the WIO-SAP project			
Activities: D.1.3.1. Support to countries to monitor WIO-SAP project and state of the coast environment	150,000	200,020	350,020
Activity D.1.3.2. Presentation of regular reports on WIO-SAP Project to national inter-ministerial committees (linked to D. 3.2.2)	0	0	0
OUTPUT D.1.4: Coordinated management, monitoring and learning			
Activity D.1.4.1. Develop capacity of the WIO-SAP project management, coordination of learning and exchange, resource mobilization	100,000	55,988	155,988
Activity D.1.4.2. Strengthening the capacity of national structures including, the Nairobi Convention Focal Points to provide overseer the WIO-SAP project implementation	150,000	68,287	218,287
Activity D.1.4.3. Support the establishment and operationalisation of the regional coordination and implementation structures	150,000	122,999	272,999
Sub-total Outcome D.1:	800,000	1,469,478	2,269,478
OUTCOME D.2: Knowledge management systems and exchange mechanisms			
OUTPUT D.2.1: Expansion of Nairobi Convention Clearing House Mechanism			
Activities: D.2.1.1. Improvement of the NC Clearing House Mechanism	300,000	90,805	390,805
Activity D.2.1.2. Development of institutional and financial means for sustaining NC knowledge management role	150,000	50,063	200,063
OUTPUT D.2.2: Nairobi Convention science-policy exchange platform			
Activities: D.2.2.1. Development of a medium-term science for policy programme	100,000	200,000	300,000
Activity D.2.2.2. Regional scientific platforms and networks for coordinating the implementation of the project	150,000	200,000	350,000
Sub-total Outcome D.2:	700,000	540,868	1,240,868
OUTCOME D.3: Project Management and Coordination			
Output D.3.1. Regional Project Coordination			
Activity D.3.1.1 Recruit, establish and operate PMU, writing, reviewing and publication of technical reports/papers/awareness materials from the project	1,500,000	1,742,752	3,242,752
Activity D.3.1.2. Project Steering Committee (PSC)	250,000	108,744	358,744
Sub-total Outcome D.3:	1,750,000	1,851,496	3,601,496
Output D.3.2. National Project Coordination			
Activity D.3.2.1. National Implementation Committees (NICs)	250,000	20,087	270,087
Activity D.3.2.2. National Focal Point Institutions (NFPIs)	250,000	33,655	283,655
Sub-total Outcome D.3.2:	500,000	53,742	553,742
Output D.3.3: Monitoring & Evaluation (M&E)			
Activity D.3.3.1. Mid-Term Evaluation (MTE)	40,000	28,970	68,970
Activity D.3.3.2. Terminal Evaluation (TE)	60,000	19,446	79,446
Activity D.3.3.3. Annual External Audits	44,000	5,000	49,000
Sub-total Outcome D.3.3:	144,000	53,416	197,416

Sub-total Component D:	3,894,000	3,969,000	7,863,000
TOTAL FOR COMPONENTS A to D:	10,867,000	77,683,484	88,550,484
TOTAL PROJECT BUDGET:	**10,867,000**	77,683,484	88,550,484

7.2 Project Co-Financing

The WIOSAP project received a significant co-financing contributions totalling US$ 77,683,484 which is equivalent to 76% of the total budget of the project. The high co-financing contribution is a clear indication of the massive support that the project enjoys among its key national and regional partners. The governments of participating countries through their national institutions are the main contributors providing co-financing amounting to US$ 67,248,741. The second largest block of contributors is the WIO-C Partners (Birdlife International, WIOMSA and WWF) followed closely by UNEP.

WIO-C partners in their own individual capacity are expected to mobilise parallel co-financing for marine and coastal conservation activities in the region, including flagship initiatives such as the WWF Coastal East Africa Initiative, IUCN, WIOMSA, among others. Examples of some of the baseline contributions include the following:

- WWF under the *Coastal East Africa Initiative* will invest directly or indirectly, a parallel co-financing towards WIOSAP project components A and D.
- The IUCN-Nairobi Convention-WIOMSA-CORDIO partnership project on the Resilient Coast is expected to invest a parallel co-financing for activities contributing to critical habitat management for project outcomes A.1 and A.2.
- The IUCN *Water & Nature Initiative (WANI)* has provided important foundational support in developing component C for building the capacity in the WIO region for Environmental Flow Assessments.
- WIOMSA has a number of MARG and MASMA grant projects providing parallel co-financing totalling US$12 million that will contribute to the WIOSAP baseline.

The UNEP hosts and administers the Nairobi Convention and the proportion of the Convention's Trust Fund that will serve as parallel co-financing contribution to project's components on governance and management of coastal and marine resources in the WIO region is US$ 1,750,000. In addition, over the project implementation period, UNEP's Division of Environmental Policy Implementation (DEPI) will commit an additional US$1,565,000 in cash and in-kind resources towards coastal ecosystem assessment and conservation activities in the WIO region. UNEP's Environment Fund and other bilateral donors will also provide support for the development of the ICZM protocol and the ratification of the LBSA protocol, including other activities relevant to the GPA, such as municipal wastewater management and development of water quality standards, etc. Total UNEP co-financing to the project is US$ 3,315,000. The project is also expected to leverage additional co-financing contributions from other partners during its implementation. These will be reported in the annual co-financing reports that will be prepared by the Project Manager.

7.3 Project Cost-Effectiveness

The WIOSAP Project considered three alternative approaches for addressing the various challenges threatening the sustainable management and conservation of the coastal and marine environment in the WIO Region. The first approach considered is the business-as-usual approach in which there is no intervention and current trends are left to continue without additional support. This approach was

considered to be inappropriate because the current situation in the WIO region is such that the existing problems and challenges facing the coastal and marine environment are not being adequately addressed across the *entire* region. Also, the degradation of the coastal and marine critical ecosystems is on an upward trend and in the absence of any significant intervention, the situation is likely to continue to deteriorate, with a possibility of reaching an irreversible stage.

The second approach that was considered was to adopt a purely thematic approach in which interventions and catalytic actions will be focused on specific thematic area such as coastal water pollution. This approach would entail provision of support to projects that are being implemented in the region and which are focused on a specific thematic area. This approach was also found to be unsuitable in that it has low possibility of achieving the desired goal of the WIOSAP project in view of the nature, magnitude and complexity of the numerous high priority issues that need to be dealt with in the WIO region. It was noted that addressing only one thematic issue in participating countries would not allow for the required multi-sectoral linkages including sharing of knowledge, experiences and lessons among various stakeholders in the WIO Region. Thus, the thematic approach would be an ineffective and inefficient way of achieving sustained progress in the management and conservation of the coastal and marine ecosystems in the WIO Region.

The third approach that was considered is the integrated multi-thematic approach that is based on the experience gained by various stakeholders through implementation of projects focussed on the management and conservation of the coastal and marine environment in the WIO Region. This approach was considered to be more appropriate for the WIO region considering the multitude of problems that need to be addressed. There is consensus among the governments of the participating countries and partners that a region-wide multi-sectoral approach is a much more cost-effective approach than undertaking actions based on a specific thematic area. This is considered especially important when dealing with transboundary issues such as the alteration of river flows, degradation of coastal and marine critical ecosystems and water pollution in the WIO region. Dealing with transboundary river-basins and coastal and marine ecosystems in an integrated manner at the regional level has a potential of yielding tangible results in terms of cost effectiveness. There is also a high chance of optimizing both human and financial resources by: (1) considering the transboundary dimensions of the priority issues to be addressed, and (2) by tackling transboundary problems with the goal of yielding regional benefits.

To achieve the project objective and obtain the tangible results, the project's five-year implementation period focuses on activities that will provide significant and sustainable impacts. The project would build on the experiences of existing institutions including best practices, knowledge and networks in the WIO region. The project would also focus on addressing constraints that have been identified within the existing national and regional frameworks. The activities described in this project document are therefore designed to provide tailor-made technical assistance and building of the capacity of relevant national and regional institutions and other stakeholders, including the strengthening of institutional and regulatory frameworks for sustainable conservation of coastal and marine ecosystems. The project will also adapt existing best practices, guidelines, methodologies and technologies for sustainable management and conservation for the coastal and marine ecosystems and improve mechanisms of disseminating them widely to various stakeholders in the region.

It should be noted that the WIOSAP Project builds upon the willingness of the governments of participating countries in the WIO Region to work jointly to promote rational use of the transboundary river-basins, coastal and marine ecosystems and their resources, taking into account the role of these resources in the economic development and environmental health of the region. The integrated management approach as demonstrated by the TDA/SAP formulation model, including the regional and national cross-sectoral institutional and implementation arrangements such as the Regional Task Forces and inter-ministerial coordination committees, can help overcome the limitations of the traditional sectoral approach in the management of coastal and marine natural resources. The multi-sectoral/multi-thematic approach has the advantage of facilitating simultaneous

consideration of economic and ecological outcomes in the sustainable management of the whole coastal and marine environmental system.

Project cost-effectiveness is also strongly enhanced by the partnership approach that will be adopted by the project in the implementation of various key activities as outlined in this document. Partnership is an important pillar of the project at both the national and regional levels, and this allows greater coordination between different stakeholder's interventions including pooling of resources together to create greater impact on the ground. It also allows participating countries and their partners to establish synergies and multiplier effects with a far much greater potential of yielding cost-effectiveness as compared to the ineffective efforts by various individual players focused on a specific thematic area.

The project cost-effectiveness is also enhanced by building on the existing national and regional capacity and also working through established institutional and implementation structures that were developed under the auspices of the Nairobi Convention and the WIO-LaB project, rather than inventing and developing new structures. Also, by integrating into the project, mechanisms of promoting learning from the previous lessons, mistakes and successes of the WIO-LaB Project including other GEF-IW projects, the project's cost effectiveness will be enhanced.

In conclusion, it can be noted that cost-effectiveness of the WIOSAP project would be achieved through the following: (i) design and implementation of customized-pilot activities that can yield concrete results and that can be up-scaled in the region, (ii) supporting the existing national and regional institutional frameworks and processes that have potential for delivering results (e.g., those established under the Nairobi Convention, etc.) and (iii) promoting an integrated participatory approach involving the key stakeholders so that coordination of activities and sustainability of results are optimized. Previous experience in the WIO Region shows that a 'bottom-up' participatory approach involving key stakeholders in all stages of the project cycle is more beneficial as compared to the traditional 'top-down' approach. Also, adaptive management which is embedded within an ecosystem-based management approach is now recognized as the best-practice for coastal and marine ecosystem management. The project design has taken into consideration all these approaches.

APPENDIX 1: BUDGET BY PROJECT COMPONENTS AND UNEP BUDGET LINES

Project title: Implementation of the Strategic Action Programme for the protection of the Western Indian Ocean from land-based sources and activities								
Project number: 4940								
Project executing partner: UNEP/Nairobi Convention Secretariat								
Project implementation period: From: **June 2015** To: **July 2020**			Expenditure by calendar year					
UNEP Budget Line			**2015**	**2016**	**2017**	**2018**	**2019**	**Total**
10	**PERSONNEL COMPONENT**							
	1100	Project personnel						
	1101	Project Manager	102,000	102,000	102,000	102,000	102,000	510,000
	1102	Project Technical Officer/Scientist	84,000	84,000	84,000	84,000	84,000	420,000
	1102	Policy Officer/Governance Officer	84,000	84,000	84,000	84,000	84,000	420,000
	1103	Administrative Assistant	30,000	30,000	30,000	30,000	30,000	150,000
	1199	**Sub-total**	**300,000**	**300,000**	**300,000**	**300,000**	**300,000**	**1,500,000**
	1200	Consultants						
	1201	National Consultants	100,000	100,000	50,000	50,000	50,000	350,000
	1202	International Consultants	50,000	50,000	50,000	50,000	50,000	250,000
	1203	Technical Support on LBSA activity	25,000	35,000	25,000	25,000	25,000	135,000
	1299	**Sub-total**	**175,000**	**185,000**	**125,000**	**125,000**	**125,000**	**735,000**
	1300	Administrative Support						-
	1301	Support to National Focal Point Offices	100,000	100,000	100,000	100,000	100,000	500,000
	1302	Support to the Regional coordination structures	10,000	10,000	10,000.00	10,000.00	10,000	50,000
	1303	Support to the CHM	15,000	15,000	15,000	15,000	10,000	70,000
	1399	**Sub-total**	**125,000**	**125,000**	**125,000**	**125,000**	**120,000**	**620,000**
	1600	Travel on official business						
	1601	Project Manager Travel	25,000	25,000	25,000	10,000	10,000	95,000
	1602	Project Technical Officer Travel	10,000	10,000	10,000	10,000	10,000	50,000

	1603	Policy/Governance Officer Travel	10,000	10,000	10,000	10,000	10,000	50,000
	1604	Administrative Assistant Travel	2,000	2,000	2,000	2,000	2,000	10,000
	1699	**Sub-total**	**47,000**	**47,000**	**47,000**	**32,000**	**32,000**	**205,000**
1999	**Component total**		**647,000**	**657,000**	**597,000**	**582,000**	**577,000**	**3,060,000**
20	**SUB-CONTRACT COMPONENT**							
	2100	Sub-contracts (MOUs/LOAs for cooperating agencies)						
	2101	IAEA-MSL (Monitoring Framework)	25,000	50,000	25,000	25,000		125,000
	2102	WIOMSA	50,000	50,000	20,000	20,000	10,000	150,000
	2105	National Universities	50,000	50,000	50,000	50,000		200,000
	2199	**Sub-total**	**125,000**	**150,000**	**95,000**	**95,000**	**10,000**	**475,000**
	2200	Sub-contracts (MOUs/LOAs for supporting organizations)						
	2201	In-country interventions (wastewater)	150,000	150,000	100,000			400,000
	2202	In-country interventions (Effluent Reduction)	100,000	150,000	100,000			350,000
	2203	In-country interventions (Restoration)	100,000	150,000	100,000			350,000
	2204	In-country interventions (ICZM)	100,000	120,000	100,000			320,000
	2205	Spatial Planning	100,000	50,000	50,000	10,000	-	210,000
	2206	Management Plans	50,000	50,000	50,000	50,000	-	200,000
	2207	Ecosystem Valuation	50,000	50,000	50,000		-	150,000
	2208	Development of Extractive Use Strategies	50,000	50,000	50,000		-	150,000
	2209	Vulnerability Assessment	20,000	25,000	25,000			70,000
	2210	Regional Critical Ecosystem Indicators	50,000	50,000	38,000			138,000
	2211	National monitoring of critical ecosystems	50,000	50,000	50,000			150,000
	2212	Local Community Empowerment on WQ issues	50,000	50,000	50,000	50,000		200,000
	2213	Harmonisation of WQ monitoring frameworks	25,000	25,000	25,000			75,000
	2214	Review of Regional Water Quality Standards	25,000	25,000	25,000			75,000

	2215	Implementation of WQ Monitoring Frameworks	50,000	50,000	50,000	50,000		200,000
	2216	Conduct Environmental Flow Assessment	50,000	50,000	50,000	50,000		200,000
	2217	Develop and Implement EFA Plans	50,000	50,000	50,000	50,000		200,000
	2218	Development of EFA Guidelines	50,000	50,000	50,000	25,000		175,000
	2219	Conjunctive River Basin Management	50,000	50,000	50,000	50,000		200,000
	2220	Development of ICM Protocol	50,000	50,000	50,000			150,000
	2221	Ratification of LBSA Protocol	25,000	25,000	50,000	6,000		106,000
	2223	Coordinated Management and Learning	50,000	50,000	50,000	50,000		200,000
	2224	Clearing House Mechanism	50,000	50,000	50,000	50,000		200,000
	2225	Establish Science Exchange Platform	50,000	50,000	50,000	50,000		200,000
	2299	**Sub-total**	**1,645,000**	**1,770,000**	**45,000**			**4,269,000**
	2300	Sub-contracts (for commercial purposes)						
	2301	Publicity and awareness	50,000	50,000	50,000	50,000	50,000	250,000
	2303							-
	2399	**Sub-total**	**50,000**	**50,000**	**50,000**	**50,000**	**50,000**	250,000
	Component total		**1,820,000**	**1,970,000**	**190,000**	**145,000**	**25,000**	**4,994,000**
2999								
	TRAINING COMPONENT							
30	3200	Group training						
	3201	Environmental Flow Assessment	25,000	25,000				50,000
	3202	Spatial Planning	25,000	25,000				50,000
	3203	Ecosystem Evaluation	25,000	25,000				50,000
	3204	River Basin Study Tour	25,000	25,000				50,000
	3206	LBSA Educational Programme	50,000	50,000	20,000	20,000	10,000	150,000
	3299	**Sub-total**	**150,000**	**150,000**	**20,000**	**20,000**	**10,000**	**350,000**
	3300	Meetings/Conferences						
	3301	Regional Task Forces Meetings (WSQ & PADH)	100,000	100,000	100,000	100,000	100,000	500,000
	3302	Steering Committee Meetings	50,000	50,000	50,000	50,000	50,000	250,000

	3303	National Implementation Committees Meetings	40,000	40,000	40,000	40,000	40,000	200,000
3999	3304	National Focal Point Institution Meetings	25,000	25,000	25,000	25,000	25,000	125,000
	3305	Legal Task Force Meetings	25,000	25,000	25,000	25,000	25,000	125,000
	3306	Science-Policy Forum	25,000	30,000	35,000	45,000	45,000	180,000
	3307	Adoption of ICZM Protocol	25,000	25,000	25,000	38,000	45,000	158,000
	3399	**Sub-total**	**290,000**	**295,000**	**300,000**	**323,000**	**330,000**	**1,538,000**
40	**Component total**		**440,000**	**445,000**	**320,000**	**343,000**	**340,000**	**1,888,000**
	EQUIPMENT AND PREMISES COMPONENT							
	4100	Expendable equipment						
	4101	Office Supplies	2,000	2,000	2,000	2,000	2,000	10,000
	4102	Computer stationaries (cartridges, etc.)	2,000	2,000	2,000	2,000	2,000	10,000
	4103	Unspecified supplies	500	500	500	500	500	2,500
	4199	**Sub-total**	**4,500**	**4,500**	**4,500**	**4,500**	**4,500**	**22,500**
	4200	Non-expendable equipment						
	4201	Computer hardware	20,000	20,000.00				40,000
	4202	Office Equipment	40,000	10,000	-	-	-	50,000
4999	4203	Water Quality Monitoring Equipment	50,000	100,000	100,000			250,000
	4204	GIS equipment	50,000	100,000	70,000			220,000
	4299	**Sub-total**	**160,000**	**230,000**	**170,000**			**560,000**
50	**Component total**		**164,500**	**234,500**	**174,500**	**4,500**	**4,500**	**582,500**
	MISCELLANEOUS COMPONENT							
	5100	Operation and maintenance of equipment						
	5101	Maintenance of computer hardware	500	500	500	500	500	2,500
	5102	Maintenance of Office Equipment	500	500	500	500	500	2,500
	5103	Maintenance of GIS equipment	500	500	500	500	500	2,500
	5199	**Sub-total**	**1,500**	**1,500**	**1,500**			**7,500**

	5200	Reporting costs						
	5201	Publication of Reports of meetings	2,000	3,000	5,000	5,000	5,000	20,000
	5202	Publication of Technical Reports	1,000	4,000	5,000	15,000	25,000	50,000
	5203	Publication of project newsletter	4,000	4,000	4,000	4,000	4,000	20,000
	5204	Publication of policy briefs and lessons	4000	6000	10000	10000	5000	35,000
	5205	Printing of spatial planning maps			3000	3000	4000	10,000
	5206	Printing of awareness materials	2000	2000	2000	2000	2000	10,000
	5299	**Sub-total**	**11,000**	**17,000**	**14,000**	**24,000**	**34,000**	**145,000**
	5399	**Sub-total**	-	-	-			-
	5301	Communication (Telephone, internet, etc.)	2,000	2,000	2,000	2,000	2,000	10,000
	5302	Postage charges	2,000	2,000	2,000	2,000	2,000	10,000
	5303	Freight and port clearance charges	2,000	2,000	2,000	2,000	2,000	10,000
	5400	Hospitality and entertainment						
	5401	Reception for Regional Task Forces	3,000	3,000	3,000	3,000	3,000	15,000
	5402	Reception for Steering Committee	3,000	3,000	3,000	3,000	3,000	15,000
	5403	Reception for Inter-Ministerial Committee	3,000	3,000	3,000	3,000	3,000	15,000
	5499	**Sub-total**	**9,000**	**9,000**	**9,000**	**9,000**	**9,000**	**45,000**
5999	5500	Evaluation						
	5501	Mid-Term Evaluation			40,000.00			40,000
99	5502	Terminal Evaluation					60,000.00	60,000
	5581	Annual External Audits	9,000	9,000	9,000	9,000	9,000	45,000
Previous Budget (Rev.	**5599**	**Sub-total**	**9,000**	**9,000**	**49,000**	**9,000**	**69,000**	**145,000**
Component total			**21,500**	**27,500**	**24,500**	**33,000**	**43,000**	**342,500**
TOTAL			**3,093,000**	**3,334,000**	**1,306,000**	**1,107,500**	**989,500**	**10,867,000**
GRAND TOTAL								**10,867,000**

APPENDIX 2: CO-FINANCING BY ACTIVITY

Reference should be made to Table in Section 7.1.

APPENDIX 3: INCREMENTAL COST ANALYSIS

The GEF Instrument states that "*the GEF…shall operate for the purpose of providing new and additional grant and concessional funding to meet the agreed incremental costs of measures to achieve agreed global environmental benefits*" in the GEF focal areas. The relevant GEF guidelines outline five steps for determining the incremental costs of a project during the preparation phase.

i) Determine the environmental problem, threat or barrier and the *business-as-usual* scenario.
ii) Identify the *global environmental benefits* and fit with GEF strategic programs and priorities.
iii) Develop the *result framework* of the intervention.
iv) Provide the *incremental reasoning* and GEF's role.
v) Negotiate the role of *co-financing*.

The environmental problems, threats or barriers and the *business-as-usual* scenario have been presented in sections 2 (2.3 and 2.6) of this Project document. It is noted that without GEF intervention, the degradation of the coastal and marine ecosystems will continue to increase with the possibility of compromising global benefits. The current capacity of participating countries is such that they can only address a few issues in areas within their national jurisdiction. The current threats are such that they can only be addressed effectively at regional level.

The *global environmental benefits* provided by the coastal and marine ecosystems in the WIO Region are presented in more detail in section 3.1 of this project document. The section has also demonstrated how these benefits are consistent with GEF strategic programs and priorities. The project's *result framework* of the intervention presented in section 3.3 and Appendix 4 has been developed through a highly regional consultative process involving the participation of the contracting parties to the Nairobi Convention. The results framework provides details on the objective of the project include the main components and their outcomes, outputs and activities. It also provides details on the methods of verification of the results of the project.

Incremental reasoning defines the role for the GEF in the context of the expected global environmental benefits that will accrue following the implementation of the project. It is based on an assessment of the value added to the current coastal and marine ecosystem conservation efforts through the financial support of the GEF. The contribution of GEF can thus be considered to be catalytic in nature. As outlined in previous sections above, the baseline scenario is that while there is a very strong will amongst the governments of the participating countries, partners and other stakeholders to now proceed with SAP implementation, there is a need for an international assistance and catalytic financing, especially in order to enable participating countriues address regional, transboundary issues through multi-lateral cooperation within the framework of the Nairobi Convention. This need stems from the significant development challenges and resource limitations faced by the WIO region countries and their many competing development priorities, and the ultimate finite capacity of other development partners to finance the necessary interventions at the level required to make a beneficial and long-lasting impact. The *incremental reasoning for GEF assistance* is therefore, that existing and planned baseline-line level investments without GEF will only address some national-level requriements, and will not be adequate to generate the policy, legal and institutional reforms needed to effectively address the root causes of the priority transboundary issues.

Relevant GEF guidance states that the section in the project document on incremental reasoning (this section), will describe the expected global environmental benefits in the context of the focal area under which the proposal has been submitted for GEF funding. As outlined above the expected global environmental benefits are presented in section 3.1 of this Project Document. Finally, relevant GEF guidance also states that the project's contribution to expected global environmental benefits will be reflected by appropriate impact indictors and targets in the project results-framework. As outlined

above the project results-framework is described in section 3.3 and presented in detail in Appendix 4, and includes appropriate impact indictors and targets. The details on the negotiated co-financing contributions to the project are presented in Appendix 2 of the project document.

Cost/Benefit	Baseline (B)	Alternative (A)	Increment (A-B)
Global Benefits	• Limited restoration of the degradation coastal and marine ecosystems in the WIO Region. • Limited treatment of municipal wastewater and effluents in the WIO region. • Limited experience and implementation of communities in the management of the coastal and marine ecosystems in the WIO region. • Limited assessment of the status and threats to the coastal and marine ecosystems in the WIO region. • Coastal and marine ecosystems constitute a very small component of marine and coastal resources identified for safeguarding in global and regional initiatives.	• Replication of successful in-country interventions on the municipal wastewater treatment and the restoration of coastal and marine ecosystems and best practices developed at target sites. • Successful examples of approaches for stakeholder involvement disseminated through regional networks/ Clearing House Mechanism. • Nairobi Convention Clearing House Mechanism and other communication and networking mechanisms will continue to support enhanced conservation action in the region. • New guidelines, methodologies for economic valuation, vulnerability assessment, etc. will be applied in the region. • Ecosystem monitoring systems will be established for the coastal and marine ecosystems to monitor status and management effectiveness. • Raised awareness on the global conservation importance and priority of coastal and marine habitats.	
Domestic Benefits	• Few national projects focused on the coastal and marine ecosystems under implementation. • Low experience and awareness of the governments/policy-makers on the potential benefits of conserving coastal and marine	• Improved conservation status of coastal and marine ecosystems. • Improved management of shared coastal resources and better conservation outcomes for the coastal and	

	ecosystems. • Limited economic valuation of coastal ecosystems. • Limited assessment of the vulnerability of coastal and marine ecosystems to climate change. • No environmental flow assessments of river basins.	marine ecosystems. • Availability of information and capacity developed among managers, policy makers and local communities to implement better informed and coordinated national and regional conservation. • Enhanced capacity for advocacy among local coastal communities. • Policy reform at local, national and regional levels to mainstream coastal and marine ecosystem • Conservation needs into appropriate policies, planning and regulatory frameworks.	
COMPONENT A: SUSTAINABLE MANAGEMENT OF CRITICAL HABITATS.	Limited capacity for the development and implementation of marine spatial plans. Lack of data and information on the value of the critical coastal and marine ecosystems. There is limited capacity for economic valuation of coastal ecosystems and vulnerability assessment. Few extractive use strategies for the management of the harvesting of natural resources. No regional indicators for monitoring the state of the coastal and marine ecosystems. Few projects undertakern on the restoration of degraded mangrove forests and limited attempt to restore degraded seagrass beds and coral reef ecosystems. Lack of baseline data on coastal and marine ecosystems particularly data on the mangroves, seagrass beds and coral reefs.	Increased use and application of coastal management tools, methodologies and assessments provide an important foundation for regional collaboration and harmonized management in the region. Enhanced capacity to increase the resilience of key coastal ecosystems to the human impacts. Increased capacity for economic valuations of critical coastal and marine ecosystems including increased awareness on the importance of the coastal and marine ecosystems. Increased capacity for vulnerability assessments and spatial planning to support management and monitoring of the state of coastal ecosystems. Improved socio-economic well being of coastal communities through implementation of sustainable strategies for extractive use of coastal natural resources. Regional institutions apply regional indicators	

		to monitor changes in the state of the coastal and marine ecosystems and assesss the effectiveness of various intervention measures. Sustainability of coastal and marine ecosystem monitoring programmes. Increased realisation of local, national, regional and global environmental benefits through restoration of degraded coastal ecosystems in hotspot sites. Enhanced capacity of the participating countries and institutions to restore degraded coastal and marine critical habitats. Improved formulation of coastal and marine management policies through creation of awareness to policy maker. Increased and widespread replication of ecosystem restoration projects. Improved management of coastal areas through implementation of Integrated Coastal Management (ICM) plans. Increased capacity to undertake economic valuation of coastal and marine ecosystems.	***Comoros: US$ 5,897,143*** ***Kenya: US$ 4,000,000*** ***Madagascar: US$ 500,000*** ***Mauritius: US$ 4,500,000*** ***Mozambique: US$ 5,000,000*** ***Seychelles: US$ 3,600,000*** ***Somalia: US$ 168,400*** ***South Africa: US$ 3,480,000*** ***Tanzania: US$ 7,000,000*** ***UNEP: US$ 720,000*** ***Birdlife International: US$ 504,000*** ***WIOMSA: US$ 3,710,000*** ***WWF: US$ 1,250,000*** ***Cost to GEF: US$ 3,488,000*** ***Co-financing: US$ 40,329,543***
	Component Cost: US$ 3,488,000	***Component Cost: US$ 43,817,543***	***Component Cost: US$ 43,817,543***
COMPONENT B: IMPROVED WATER QUALITY	Increasing levels of pollution resulting from discharge of untreated effluents into the inshore waters of the WIO Region. Limited capacity for the wastewater and effluent management/treatment in the WIO region is limited. Lack of participation and poor awareness among local communities on issues related to water quality management. No long-term water quality monitoring programmes in all countries.Monitoring works are	Increased awareness and replication of wastewater treatment in-country interventions using appropriate, cost-effective technologies. Increased human and regulatory capacity for monitoring, replication and up- scaling of the wastewater treatment in-country interventions. Increased adoption of low-cost and effective technologies for the	

	usually sporadic, short-term and largely unsustainable. Countries have not enacted marine receiving water quality standards or existing water standards do not meet international norms. There are no harmonised regional effluent and marine water quality standards. There is lack of institutional and human capacity for the development and enforcement of existing water quality standards. All countries lack modalities for sustainanable financing of water quality monitoring programmes. ***Component Cost: US$ 2,310,000***	treatment of wastewater. Icreased awareness and participation of local communities and other key stakeholders in wastewater and effluent management. Increased and more effective ccordination of relevant ministries in the implementation of the vision of a pollution-free coastal environment. Institutions in participating countries implements their pollution monitoring programmes using regionally agreed methodologies and indicators. The establishment of long-term pollutant loads monitoring frameworks Increased capacity on the development and enforcement of water quality standards, including implementation of regulatory, monitoring and financing modalities ***Component Cost: US$ US$ 18,695,000***	***Kenya: US$ 3,000,000*** ***Madagascar: US$ 500,000*** ***Mozambique: US$ 6,000,000*** ***Seychelles:* US$ 995,000** **South Africa: US$ 1,710,000** ***Tanzania: US$ 4,000,000*** ***UNEP: US$ 180,000*** ***Cost to GEF: US$ 2,310,000*** ***Co-financing: US$ 16,385,000*** ***Component Cost: US$ 18,695,000***
COMPONENT C: SUSTAINABLE MANAGEMENT OF RIVER FLOWS	Limited management of river basins impacting coastal and marine ecosystems. Limited application of ecosystem based management tools such as Integrated Water Resources Management (IWRM) through reforms in the water sectors. Lack of appropriate decision-making tools for allocating water to various users including water allocation (environmental flows) for sustaining ecological systems. Limited capacity for environmental flow assessment in most of the participating countries, with the exception of South Africa. Limited capacity for undertaking and implementing EFA. Few river basin authorities have capacity to undertake EFAs.	Increased capacity for environmental flow assessment (EFA) and implementation in the region. Increased awareness on the benefits of EFA leading to more effective cooperation between river basin and coastal zone management organisations. . The environmental flow assessment studies assist policy makers and river basin managers to appreciate the environmental and socio-economic implications and trade-offs of their water investments. Reduction in the	***Kenya: US$ 5,000,000***

	Limited participation of key river basin stakeholders in river basin management in most of the countries. ***Component costs: US$ 1,175,000***	degradation of the coastal and marine ecosystems due to upstream/river basins activities. ***Component costs: US$ 18,174,941***	***Madagascar: US$ 200,000*** ***Mozambique: US$ 8,000,000*** ***South Africa: US$ 90,341*** ***Tanzania: US$ 3,600,000*** ***Birdlife International: US$ 109,600*** ***Cost to GEF: US$ 1,175,000*** ***Co-financing: US$ 16, 999,941*** ***Component Cost: US$ 18,174,941***
COMPONENT D: GOVERNANCE AND REGIONAL COLLABORATION	Weak governance frameworks for coastal and marine ecosystems. Limited coordination and ineffective legislation and lack of adequate institutional framework for managing coastal stresses. Limited interventions for the management of data and information on the coastal and marine ecosystems. Limited application of inter-sect oral governance instruments such as integrated coastal zone management (ICZM) in most of the countries. Lack of effective governance of coastal and marine environment in the WIO Region. LBSA Protocol delivered by WIO-LaB Project is yet to be ratified by the participating countries. Limited capacity of Nairobi Convention Clearing House Mechanism (CHM) . Lack of awareness and acess to information by policy makersand decision makers in the region. There is minimal interaction between scientific organisations (research institutions and universities) aal organisations charged with the responsibilities of formulating and implementing policies and strategies on the use of natural coastal resources and the environment.	Increased capacity for effective environmental governance through enactment of appropriate legal and regulatory frameworks for LBSA management at regional and national. Increased awareness among policy makers on the need for the protection of the coastal and marine environment. Inter-ministerial committees and regional task forces established within the framework of the Nairobi Convention strengthened. Increased use of the Nairobi Convention Clearing House Mechanism by the participating countries Increase value of the investments of national and regional partners, promoting a shared sense of regional responsibility for the sustainable management of the coastal and marine ecosystems. Improved capacity for the application of ICZM in coastal planning processes. Increased momentum for the ratification of the LBSA Protocol as well as establishment of the mechanisms for its implementation. Strengthened Nairobi Convention structure to ensure effective implementation of the WIO-SAP Project. Nairobi Convention	

		Clearing House Mechanism plays a greater role in the exchange of information and sharing of lessons and experiences in the management of the coastal and marine ecosystems. The more informed dialogue between scientists and policy makers in the region, thus ensuring high level political awareness and concensus on issues related to the protectionof the coastal and marine environment. ***Component Cost: US$ US$ 7,863,000***	***Seychelles: US$ 5,000*** ***UNEP: US$ 665,000*** ***NC: US$ 1,750,000*** ***Birdlife International: US$ 649,000*** ***WIOMSA: US$ 400,000*** ***WWF: US$ 500,000*** ***Cost to GEF: US$ 3,894,000*** ***Co-financing: US$ 3,969,000*** ***Component Cost: US$ 7,863,000***
	Component Cost: US$ 3,894,000		
TOTAL	10,867,000	88,550,484	**Cost to GEF: US$ 10,867,000**
GRAND TOTALS			**Total Project Cost: US$ 88,550,484**

APPENDIX 4: PROJECT RESULTS FRAMEWORK

Outcomes/ Outputs	Objectively Verifiable Indicators			Means of verification	Assumptions
	Indicator	Baseline	Target		
Project objective: *To reduce impacts from land-based sources and activities and sustainably manage critical coastal-riverine ecosystems through the implementation of the WIO-SAP priorities with the support of partnerships at national and regional levels*					
Outcomes/ Outputs	**Objectively Verifiable Indicators**			**Means of verification**	**Assumptions**
	Indicator	**Baseline**	**Target**		
Outcome A.1: Appropriate tools and methodologies are used to manage critical coastal and marine habitats in order to enhance their resilience and long-term sustainability	Adoption, integration and use of tools and methodologies for improved and sustainable coastal and marine habitats management and restoration Adoption of spatial plans and establishment of planning capacity to support and guide the management process Adoption of the ICZM Protocol and ratification of LBSA Protocol by all countries by the year 2020. Close collaboration with ongoing related initiatives such as the UNDP implemented SAPPHIRE project among others to strengthen synergies	Baseline to be established on current status of existing tools Elements of spatial planning are being developed in a few partner countries, comprehensive baseline of completed spatial plans to be established No regional ICZM protocol adopted. One country ratified the LBSA protocol Establishment of coordination arrangements between WIO SAP and SAPPHIRE projects	The LBSA Protocol ratified in at least 8 countries and the ICZM Protocol signed by at least 8 countries by the year 2020. Creation of synergies between activities of WIOSAP and SAPPHIRE and integration of results into the regional governance framework of the Nairobi Convention	Reports of the Conference of Parties to Nairobi Convention. Reports of Steering Committee reports. Signed copies of LBSA and ICZM Protocols. Evidence of national level of adoption of the standards included in the CHM. Minutes of regular coordination meetings Presentation of implementation progress and results to the COP of the Nairobi Convention	Management plans are implementable based on the capacity challenges of the countries involved. Technologies introduced are socially accepted and demonstrating the results. There is a political will to develop a new protocol. National and regional institutions will participate to the extent required Continued interest in seeking synergies between activities to efficiently deliver outputs to partner countries

Output A.1.1: National institutions undertake participatory spatial planning to increase the resilience of selected key coastal ecosystems to anthropogenic impacts including the impacts of climate change and variability.	Spatial plans adopted by competent authorities and stakeholders building on extensive stakeholder analysis. All relevant sectors and a wide group of stakeholders (including civil society, private sector and women's' groups) are involved from the onset and partnerships are established with agencies that have capacity in gender training and analysis.	Marine spatial planning is not currently a standard methodology or management tool. Few marine spatial plans exist in the region and baseline to be established.	End of project target: New spatial plans prepared for at least five [5] key marine and coastal zones in at least 5 countries by 2020.	Reports of participatory dialogue processes (including gender specific considerations and the involvement of civil society). Publication of spatial plans for target sites. Project Annual reports, indicting the adoption of the plans at an appropriate level	In-country capacity is available and sufficient to build to prepare spatial planning. Political will exists to prepare and implement plans. Countries willingness to share data or allow access to data
Output A.1.2 Management plans developed and adopted for at least 5 key critical coastal and marine habitats, reinforcing the regional MPA network and mitigating habitat loss and climate change impacts;	5 critical coastal and marine habitats management plans in target countries adopted taking socio-economic dimension and in particular gender considerations into account in all stages of the process.	Few coastal management plans prepared and implemented (baseline to be established).	End of project target: Management plans adopted for at least [5] coastal zones in at least 5 countries by 2020.	Reports of participatory processes including gender specific considerations, targeted meetings with women's groups and the involvement of civil society. Publications on coastal management plans for target sites. Project Annual reports, indicating adoption	Capacity in-country is available and sufficient to develop management plans Political will exists to prepare and implement plans.
Output A.1.3 At least one key degraded critical coastal **habitats restored** and resilience increased;	Ha of priority habitats restored.	No area has been restored within the SAP implementation framework.	End of project target: By 2020, there will be at least a total of 5 ha each of coral reefs, seagrass beds, mangrove forest in degraded hotspot sites.	Reports of on the ground interventions and experience gained in initiating and sustaining restoration projects documented and shared on the project website and in reports and meetings of the Nairobi Convention. Mid-term and Terminal Evaluation Reports. State of the coast reports. Project Annual reports.	Communities and all stakeholders can be engaged in restoration works. Particular attention is paid to multistakeholder dialogue representing variety of groups including women and civil society. There is capacity and knowledge for restoration of ecosystems.

Outcomes/ Outputs	Objectively Verifiable Indicators			Means of verification	Assumptions
	Indicator	**Baseline**	**Target**		
Output A.1.4 **Pilot actions** build capacity in ICM, demonstrating how ICM can be strengthened at the local level through the empowerment of communities and other actors at on the ground interventions (under A.1.2 and A.1.3).	Number of ICZM plans in target coastal sites involving wide range of stakeholders. Number of multi-stakeholder meetings held with all involved stakeholders including civil society and women's groups	ICZM is not currently used as a standard tool for the empowerment of communities Community stakeholder awareness of ICZM is not widespread in the region yet Baseline to be established	<u>End of project target:</u> By 2020, at least 5 ICZM plans for target coastal zones will be developed, involving wide stakeholder dialogue including women and civil society.	Copies of ICZM plans for target sites. Minutes of meetings and considerations of stakeholder involvement taken up in the development of the plans Project Annual reports, including the adoption of the plans at appropriate levels	There is political will to develop ICZM plans in target sites. Particular attention is paid that the widest stakeholder dialogue is ensured including the voice of women and civil society. In-country capacity exists for development and implementation of ICZM Plans.
***Outcome** A.2 **Appropriate tools and methods** (which integrate economic, social and environmental considerations) support coastal planning and management*	Tools such as regional guidelines for economic valuation and guidelines for vulnerability assessment and spatial planning and extractive use strategies are integrated into coastal planning and management.	Currently tools and methods for integrating economic valuation, guidelines for vulnerability assessment, spatial planning and extractive use strategies are not widely used in coastal planning and management.	By 2020, tools which integrate economic, social and environmental considerations will be integral part of the coastal planning and management process	Tools are adopted and used in the existing planning and management processes.	The in-country support and capacity is made available to develop and implement these tools Political willingness supports the development of these tools.

Output A.2.1 Economic valuation of at least three (3) key critical coastal and marine habitats including integration of economic valuation to coastal management and planning.	Regional guidelines for Economic Valuations of at least three (3) key coastal ecosystems adopted and used in actual valuation studies. Values of coastal and marine ecosystem services incorporated in management planning including particular attention to the involvement from the onset - and considerations of women and civil society.	Economic valuation guidelines have as yet not been established on a regional scale. Management plans do not as yet integrate information on values of ecosystem services	End of project target: By 2020, Economic valuation studies will be undertaken for at least 1 coastal ecosystem in at least 5 countries in the region using the guidelines. End of project target: By 2020, information on the value of coastal and marine ecosystems is used in decisions of coastal planning.	Reports of Economic Valuation studies. ICZM Reports clearly showing the values are used in the planning. Project Annual reports.	Capacity in-country is available and informed to undertake economic valuation of coastal ecosystems. Experts with a broad knowledge base can be identified and appointed. Regional guidelines are developed before the valuation studies. Willingness to engage widely with stakeholders.

Outcomes/ Outputs	**Objectively Verifiable Indicators**			**Means of verification**	**Assumptions**
	Indicator	**Baseline**	**Target**		
Output A.2.2 Tools and guidelines for vulnerability assessment and spatial planning supports monitoring and management actions.	Toolkits and guidelines for vulnerability assessments, spatial planning developed and applied including gender sensitive analysis.	There are as of yet no guidelines used for vulnerability assessment and spatial planning in the region.	End of project target: By 2020, guidelines and methodologies for vulnerability assessment and spatial planning will be used in at least 5 countries in the region.	Vulnerability assessment and spatial planning finalised using the guidelines and tools. Guidelines for ecosystem vulnerability assessment. Guidelines for spatial planning.	Planners and policy makers will make effective use of tools and guidelines. Guidelines are user friendly and meeting the needs of users.
Output A.2.3 Sustainable extractive use strategies developed and adopted for specific coastal and marine natural resources.	Number of sites with extractive use strategies for coastal natural resources adopted for implementation.	The countries have not developed extractive use strategies for specific coastal and marine resources as of yet	End of project target: By 2020, sustainable extractive use strategies will be developed and adopted for specific coastal and marine natural resources, in at least 5 countries in the region.	Reports on sustainable extractive strategies. Project Annual reports, showing the involvement of Stakeholders and adoption of the strategies.	Effective collaboration between ministries/ authorities (fisheries, forestry, commerce, local government).

Outcomes/ Outputs	**Objectively Verifiable Indicators**	**Means of verification**	**Assumptions**

	Indicator	Baseline	Target		
Output A.2.4 Adoption of regional indicators and baseline assessment in support of critical habitat monitoring and management.	A set of regional indicators for ecosystem monitoring, assessment and management, developed and adopted (taking the SDG development into account) including socio economic and gender specific indicator	Currently regional indicators and guidelines are not commonly used for ecosystem assessment in the region.	End of project target: By 2017, **regional indicators** and guidelines for ecosystem assessment will be drafted. They will be tested in all habitat pilot sites and wider to set baseline for 2016. End of project target: By 2020, indicators are monitored towards the end of the project to demonstrate the change in the ecosystem status in pilot sites and in the region in general. SDG process is integrated into the indicator framework.	Report on the adoption of regional indicators. Reports of PADH, WSQ and MWM Task Forces. Project reports showing the indicator monitoring results. Reports on the SDG development related to ecosystem monitoring.	Task Forces reach agreement on regional indicators and assessment methods. Capacity to carry out indicator monitoring exits in target countries. Data and information available in support of the regional set of indicators.
*Outcome B.1 Quality of coastal receiving waters improved through **pilot interventions***	Overall reduction of the annual amount of nutrient input (Kg/year) to the coastal waters in pilot sites leads to improved quality of coastal and receiving waters	There is limited data available on effluent treatment in the pilot sites. ICM plans are currently not systematically incorporating water quality	Total of at least six innovative investments in improved wastewater management in six countries Improved quality of coastal receiving waters due to reduction of N & P pollution loads by at least 50% over baseline (kg/year)	Water quality/pollution standards and monitoring reports	Capacities in country and knowledge to promote and implement pilot interventions Political will to support pilot interventions.

Output B.1.1 Cost-effective technologies for municipal wastewater treatment demonstrated in at least 3 sites;	Removal rates of N and P in the sites Best practices of innovative pilot activities captured and disseminated to all key stakeholders including civil society and user groups (i.e. women's groups)	Limited baseline data available. Limited awareness of the reuse of treated wastewater	End of project target: Reduction of at least 50% of the baseline of N& P pollution loads in the three hotspots initiated	Site visits to demonstration projects. Reports on results of stakeholder dialogues including participation of women's groups. Reports of regional Task Forces (MWM, WSQ). Reports of on the ground interventions. Reports on municipal wastewater management. Project Annual reports, showing the monitoring results	There is capacity and knowledge to adopt cost-effective technologies for wastewater treatment. There is a will among policy makers to promote cost effective technologies for wastewater treatment.

Outcomes/ Outputs	**Objectively Verifiable Indicators**			**Means of verification**	**Assumptions**
	Indicator	**Baseline**	**Target**		
Output B.1.2 Effluents at a minimum of 3 demonstration sites are collected, treated, recycled and/or disposed of in accordance with international best practices.	Removal rates of COD and nutrients. Increased m^3 of reuse of treated wastewater	There is currently no treatment of effluents in pilot sites.	End of project target: By 2020, At least 50% of the treated wastewater from hotspots reused and recycled three hotspots.	Site visits to demonstration projects. Reports on the ground interventions. Reports of regional task forces. Project Annual reports, showing the monitoring results.	Political willingness by local administrations; pro-active participation by local industries. Necessary targeted awareness raising of local community of the planned activities from the onset and throughout the project

Output B.1.3 Pilot actions undertaken to build capacity for water quality management and ICM promoted through empowerment of communities and other actors at the on the ground interventions.	ICM plans incorporate water quality management. Number of multistakeholder meetings held in preparation of the ICM plans with particular attention is given to the empowerment of women and the input of civil society	There are currently no ICM plans fully incorporating Water quality management.	End of project target: By 2020, there will be ICM plans in at least 5 countries in the region, incorporating water quality management.	Minutes of stakeholder meetings including representation of the women and civil society. National reports/ MTR site visits. Project Annual reports showing the adoption of the ICM plans.	Communities are able to understand and effectively participate in the stakeholder dialogues. Community experts with a broad knowledge base and local expertise should be identified and appointed. Careful selection of communities and community 'champions'
Outcome B.2 ***Regulatory Framework*** *for monitoring and management of pollutant loads, effluents and receiving water quality adopted at regional level*	Policy, legislative and institutional arrangement to support monitoring frameworks for pollutant loads, effluents and receiving water quality set up supporting SAP implementation at national and regional level as appropriate. Monitoring and management frameworks are strengthened at both national and regional levels	There is currently no comprehensive regionally harmonised water quality and pollution monitoring framework set up for the region.	A regionally harmonised water quality and pollution monitoring framework set up for the region by 2020.	Adoption of regional (and national) water quality standards and a regional monitoring framework is in place at regional level	Support of all participating countries will need to be ensured Data availability, and access
Output B.2.1 Regionally harmonized framework for monitoring pollution loads and water quality standards developed for receiving coastal waters.	Regional receiving marine water standards developed and agreed with elements of participative monitoring	There is currently no regionally harmonised water quality and pollution monitoring in the region. There are no regionally agreed receiving marine water standards.	End of project target: By 2020, regionally receiving marine water standards will be agreed upon in the region.	Decision of the Nairobi Convention COP on the adoption of the regional water quality standards Regional standards.	There is political will to develop a regional standards Capacity exist in the region to monitor the variables set in the standards.

Outcomes/ Outputs	Objectively Verifiable Indicators			Means of verification	Assumptions
	Indicator	Baseline	Target		
Output B.2. Regionally harmonized standards and monitoring framework for pollutant loads and effluent and marine water quality standards adopted by at least five (5) countries through participatory national and regional consultations.	Regionally harmonised total pollution load standards. Number of regional (2) and national (5) mulitstakeholder consultations taken place.	There is no regionally harmonised pollution load standards.	End of project target: By 2020, regionally harmonized total contaminant load standards will be adopted.	Reports on regionally harmonised pollution load standards. Reports of regional and national multistakeholder dialogues	There is political will to develop a regional pollution load standard. Capacity exists to develop the monitoring of the pollution loads.
Output B.2.3 Regulatory and human capacity of national and regional facilities/institutions strengthened to promote implementation of water quality monitoring using regional standards.	Number of competent institutions involved in the network of monitoring of water quality. Allowable difference between the quality of monitoring between the reference institution and other participating institutions	There is currently weak capacity to apply and enforce water quality standards. There is limited network of institutions in monitoring the quality of water Difference in water quality monitoring results and quality of data is not at an allowable level.	By 2020, At least five scientists from each participating country are involved in the network of water quality monitoring. By 2020, monitoring results show an improved quality of monitoring activities among all the participating institutions.	Reports on the pollution monitoring and quality of the results.	Improved capacity will contribute to improved water quality monitoring.

Outcome C.1 ***Environmental Flow Assessments*** *(EFAs) underpin the integrated management of river flows and coastal areas and implementation of assessment recommendations strengthens ecosystem resilience*	Strengthened resilience and improved and integrated management of river flows and coastal areas	Currently systematic environmental flow assessments are undertaken in the region There are still important data gaps reduced baseflows	End of project target: By 2020 improvement of flows in pilot rivers	The recommendations of the Environmental Flow Assessment studies are integrated into the management decisions of river authorities	Capacities in countries are available and sufficient to facilitate the integration of the EFA results into management and policy decision making.

Outcomes/ Outputs	**Objectively Verifiable Indicators**			**Means of verification**	**Assumptions**
	Indicator	**Baseline**	**Target**		
Output C.1.1 Environmental flow assessments conducted in at least three (3) pilot river basins to determine the environmental, economic and social trade-offs in water allocation and the need for management of river flows with respect to coastal areas.	Number of studies of Environmental Flow Assessment.	Environmental flow assessments are as yet not carried out for the majority of rivers basins in the region.	End of project target: Environmental Flow Assessment studies conducted in at least 3 river basins draining into the Indian Ocean.	Reports of Environmental Flow Assessment studies. Project Annual reports.	The project would build the capacity for EFA studies. There is a political will to carry out EFA in target river basins. There is sufficient knowledge of using the EFA results in policy decisions.
Output C.1.2 Implementation of flow assessment recommendations and participatory river basin management approaches yield environmental, economic and/or social benefits as a result of improved river flows to the coast.	Number of integrated river basin management plans (including critical socio-economic elements and gender considerations) Number of assessment recommendations implemented	The baseflow has been reduced. The baseline for target rivers is currently not established.	End of project target: By 2020, implementation of EFA recommendation show initial improvement of flows in pilot rivers.	EFA reports. Annual reports, showing the baseflow in the target rivers.	Effective frameworks to resolve political economy issues and water use trade-offs can be developed as part of the EFAs
Outcome C.2 ***Capacity*** *to conjunctively manage river flows and coastal areas strengthened*	Strengthened and improved capacity for conjunctive management of rivers and coastal areas	Lack of institutional capacity and governance and use of regional guidelines.	Enhanced capacities using harmonized guidelines leading to effective conjunctive management	Integration of guidelines and methodologies for Environmental Flow Assessment into management processes of river basin authorities	Ownership and sustainability of the capacities and application of the guidelines developed.

Output C.2.1 Institutional capacity for implementation of climate sensitive environmental flow assessments enhanced and supported by appropriate guidelines, methodologies and networks at both national and regional level.	Number of EFA guidelines and methodologies. Case study documentation for best practice including gender specific case studies Number of active networks involved Number of participating institutions	Currently no regional guidelines exist or are not used. Institutional capacity for implementation is still not sufficiently developed Lack of a clear appropriate governance framework	End of project target: EFA assessment exercises include strong capacity building component using the guidelines Institutional capacity is reinforced to ensure effective implementation through targeted training Harmonized policies and guidelines	Reports of regional Task Forces. EFA guidelines and methodologies.	Institutions are supported to dedicate time and resources Regional expertise will be enhanced through EFA assessments based on the guidelines.

Outcomes/ Outputs	**Objectively Verifiable Indicators**			**Means of verification**	**Assumptions**
	Indicator	**Baseline**	**Target**		
*Outcome D.1 Updated **policies** and strong institutions underpin WIO-SAP implementation*	Timely adoption and ratification of Protocols Successful implementation of outputs through coordination and guidance of existing interministerial committees and regional task forces	Process of ICZM Protocol ratification is ongoing Process of LBSA Protocol ratification is ongoing Absence of regional coordination office for WIO SAP	Accelerated ratification of the ICZM and LBSA Protocols National and regional institutional set up for WIO SAP implementation strengthened	Ratification of Protocols by countries Reports and relative decisions of the COP of the Nairobi Convention	Political support and priority given to ratification of Protocols Willingness of cooperation and synergies among existing institutions
Output D.1.1 ICZM protocol developed and adopted at the regional level.	Adoption of the ICZM Protocol.	The ongoing process for the development of ICZM protocol.	End of project target: By 2020, all Nairobi Convention parties will have signed the ICZM protocol and at least 2 countries will ratify it.	Reports of Conference of Plenipotentiaries. Ratification instruments submitted to depository.	ICZM Protocol will be given sufficient political priority by countries.
Output D.1.2 LBSA protocol ratified in at least 4 countries and supported in all countries through the development of policy briefs, model legislation and capacity building to practitioners;	Number of countries ratifying/acceding the LBSA Protocol.	LBSA Protocol signed by 8 countries. However, only Mozambique has ratified it.	End of project target: By 2020, LBSA protocol will be ratified by at least 6 countries.	Ratification instruments submitted to depository	LBSA Protocol will be given sufficient political priority

Output D.1.3 Implementation of the WIO-SAP succeeds at national level through the coordination and guidance of interministerial committees and regional task forces;	Establishment/building on existing structures.	There is no national WIOSAP project office. NC focal points and task forces act as national project focal points.	End of project target: By end of 2015, National task forces to support inter-ministerial committee and regional task forces established and operational in all participating countries.	Reports of National Focal Points. Reports of National Task Forces.	There is adequate budget to set up national coordination structures.
Output D.1.4 Establishment of a funding pipeline to support long-term implementation of the SAP through Nairobi Convention including coordination of stakeholders and facilitation of learning and exchange in support of WIOSAP project implementation.	An effective regional management structure for the implementation of the WIOSAP Project. WIOSAP PMU at the Nairobi Convention Secretariat.	The regional structure for the implementation of the WIOSAP project does not exist.	End of project target: By end 2015, the WIO-SAP Project Management Unit will have been established at the Nairobi Convention Secretariat and the first meeting of Steering Committee will be organised.	Reports of Project Steering Committee. Annual reports of the project. Reports of the Nairobi Convention COPs.	Effective regional collaboration such as with RECS and African Union commissions for project management and resource allocation.

Outcomes/ Outputs	**Objectively Verifiable Indicators**			**Means of verification**	**Assumptions**
	Indicator	**Baseline**	**Target**		
*Outcome D.2 Improved **knowledge management** systems and exchange mechanisms support WIO management, governance and awareness creation*	Integration of information on investments, climate variability and changed into improved knowledge management system (CHM) Science-policy forum actively promotes greater interaction on marine related issues	Limited policy-science interchange Lack of access to information Lack of overview of ongoing initiatives	Improved and updated multisectoral information within CHM and access to it Improved Science-policy interface with increased awareness creation, knowledge sharing of lessons learnt and policy briefs	Recognition and use of the CHM as an important source of access to reliable information for coastal and marine planning in the region	Willingness to create the necessary synergies between national and regional commitments Access to data-sharing Support and willingness to create sustainable financing mechanisms

Output D.2.1 Existing Nairobi Convention Clearing House Mechanism expanded to incorporate information on national and regional investments and projects, climate variability and change, guidelines, methodologies and success stories, among others.	Number of documents in the updated Nairobi Convention Clearing House Mechanism. Number of access to the CHM websites.	The CHM exists but limited information in it and limited access by stakeholders (baseline to be established).	End of project target: By 2020, CHM will be updated to include, information and tools that will be generated by the WIOSAP Project. By 2020, there will be at least 25% increase in the number of access to NC CHM.	CHM website. Number of new documents on CHM website. Number of hits on CHM website.	Sustainable financing mechanism is created.
Output D.2.2 Established science-policy exchange platform, under the Nairobi Convention for policy and for consensus on key LBSA and ICZM issues in the WIO region.	Science-policy forum promoting greater interaction between marine scientists and policy makers.	There exists gaps between science and policy making processes.	End of project target: By 2020, science-policy forum will be established under the Nairobi Convention. By 2020, the project will organise at least 2 science-policy workshops and facilitate preparation of at least 5 policy briefs.	Project Annual reports. Policy briefs. Reports of science-policy workshops.	Synergies between NC commitments and other regional programmes, including RECs.

APPENDIX 5: WORK PLAN

Project Components/ Outcomes	WIO-SAP Project Implementation																			
	Year 1				Year 2				Year 3				Year 4				Year 5			
	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4
Outcome A.1 Management of critical habitats to enhance ecosystem resilience and conservation																				
A.1.1.1 Development of marine spatial plans for 5 sites																				
A.1.2.1 Development of Management plans in 3 sites																				
A.1.3.1 Restoration of degraded critical habitats (1 site)																				
A.1.4.1 Pilot actions to build capacity in ICM (3 sites)																				
Outcome A.2 Development of tools and methods to support coastal planning and management																				
A.2.1.1 Application of Economic valuation methodologies (2 sites)																				

Project Components/ Outcomes	WIO-SAP Project Implementation																			
	Year 1				Year 2				Year 3				Year 4				Year 5			
	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4
A.2.2.1 Adaptation of Tools and guidelines for vulnerability assessment and spatial planning																				
A.2.3.1 Development of sustainable extractive use strategies																				
A.2.4.1 Development of key indicators for habitat monitoring and management.																				
A.2.4.2 Establishment of national modalities for monitoring																				
Outcome B.1 Improvement of quality of coastal receiving waters																				
B.1.1.1 Identification and implementation of wastewater treatment (3 sites)																				
B.1.2.1 Implementation of effluent reduction measures (1 site)																				

Project Components/ Outcomes	WIO-SAP Project Implementation																			
	Year 1				Year 2				Year 3				Year 4				Year 5			
	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4
B.1.3.1 Programmes and actions for empowering communities (4 countries)																				
Outcome B.2 Adoption of regulatory Framework for monitoring and management of pollution																				
B.2.1.1 Review and development of regional standards																				
B.2.2.1 Development and implementation of water quality monitoring framework (3 countries)																				
B.2.3.1 Capacity building for implementation of regional standards																				
Outcome C.1 Building capacity for Environmental Flow Assessments (EFAs)																				
C.1.1.1 Identification and supporting conducting EFA in 2 river basins																				

Project Components/ Outcomes	WIO-SAP Project Implementation																			
	Year 1				Year 2				Year 3				Year 4				Year 5			
	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4
C.1.2.1 Development and implementation of environmental flow management plans (2 sub-basins)																				
Outcome C.2 Strengthening of capacity for conjunctive management of river flows																				
C.2.1.1 Preparation of regional guidelines on EFA																				
C.2.1.2 Pilot development of an institutional and regulatory framework (1 site)																				
Outcome D.1 Strengthening institutions for WIO-SAP implementation																				
D.1.1.1 Finalization and implementation of the ICZM protocol																				
D.1.1.2 Capacity building for ICZM protocol implementation																				

Project Components/ Outcomes	WIO-SAP Project Implementation																			
	Year 1				Year 2				Year 3				Year 4				Year 5			
	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4
D.1.2.1 Support country processes for ratification of the LBSA protocol																				
D.1.2.2 Build capacity for implementation of LBSA protocol																				
D.1.3.1 Support countries to monitor WIOSAP																				
D.1.3.2 Presentation of regular reports on WIOSAP																				
D.1.4.1 Develop capacity of WIOSAP project management																				
D.1.4.2 Strengthening the capacity of national structures																				
D.1.4.3 Support the establishment and operationalisation of the regional structures																				
Outcome D.2 Improvement of knowledge management systems and exchange mechanisms																				
D.2.1.1 Improvement of Nairobi Convention Clearing House Mechanism																				

Project Components/ Outcomes	WIO-SAP Project Implementation																			
	Year 1				Year 2				Year 3				Year 4				Year 5			
	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4
D.2.1.2 Development of institutional and financial means																				
D.2.2.1 Establishment of NC science-policy exchange platform																				
D.2.2.2 Regional scientific platforms and networks																				
Project Coordination & Implementation																				
D.3.1.Regional Project Coordination																				
D.3.1. Recruit, establish and operate PMU																				
D.3.2. Engagement of Executing Partners																				
D.3.3. Project Steering Committee (PSC)																				
D.3.2. National Project Coordination																				
D.3.1. Assistant National Project Coordinators (ANPCs)																				
D.3.2. National Committees (NICs)																				
D.3.3. Lead institutions																				

Project Components/ Outcomes	WIO-SAP Project Implementation																			
	Year 1				Year 2				Year 3				Year 4				Year 5			
	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4	Q 1	Q 2	Q 3	Q 4
D.4. Monitoring & Evaluation (M&E)																				
D.4.1. Mid-Term Evaluation (MTE)																				
D.4.2. Terminal Evaluation (TE)																				
D.4.3. Annual External Audits																				

APPENDIX 6: KEY DELIVERABLES AND BENCHMARKS

Overall Project Output/Activity	Expected Results	Key Deliverables	Benchmarks	Timeframe
OUTPUT A.1.1: National institutions undertake participatory spatial planning to increase the resilience of selected key coastal ecosystems to anthropogenic impacts including the impacts of climate change and variability.				
Activity:A1.1.1 Development of marine spatial plans and associated capacity building for five (5) priority critical coastal and marine habitats and hotspot sites by governments and partners through participatory processes in at least five (5) participating countries in the WIO region.	Marine spatial plans for selected priority critical coastal and marine habitats developed. Demonstration of the value of coastal spatial planning to policy makers and coastal communities. National and regional training workshops on marine spatial planning.	Marine Spatial Plans More awareness on marine spatial planning. Trained officials/experts on marine spatial planning. Training manuals and reports. GIS maps. Trained members of communities.	Few Marine Spatial Plans have been developed in South Africa. None for other countries Capacity for development of Marine Spatial Plans on available in South Africa. None for other countries.	Y1 (Q3) to Y3 (Q4)
OUTPUT A.1.2: Management plans developed and adopted for at least five (5) key critical coastal and marine habitats, reinforcing the regional MPA network and mitigating habitat loss and climate change impacts.				
Activity: A.1.2.1. Development of management plans for critical coastal and marine habitats/coastal zones and support the implementation of selected plans in three (3) priority sites.	Management plans for transboundary critical coastal and marine habitats and priority coastal zones developed.	Management plans for transboundary critical coastal and marine habitats.	Few coastal ecosystems Management Plans have been developed in South Africa. None for other countries.	Y2 (Q3) to Y4 (Q3)
Output A.1.3 Three key degraded critical coastal habitats restored and resilience increased				
Activity: A.1.3.1. Identification and implementation of restoration programmes in at least one (1) priority degraded critical coastal and marine habitat site.	In-country interventions on the restoration of coastal ecosystems implemented.	Demonstration Project on coastal ecosystem restoration. Reports on in-country interventions.	Few projects on coastal ecosystem restoration undertaken in the region.	Y1 (Q2) to Y4 (Q1)
Activity: A.1.3.2. Development of guidelines, documentation of best practices and capacity building for restoration of degraded critical habitats.	Production of Guidelines and manuals for restoration of degraded critical habitats. Trained communities on the restoration of degraded critical habitats undertaken	Guidelines and manuals for restoration of degraded critical habitats. Training workshops on the restoration of degraded critical habitats.	There are no guidelines and manual for restoration of coastal ecosystems. Few training workshops on restoration of coastal eosystems.	Y1 (Q2) to Y4 (Q1)
Overall Project Output/Activity	**Expected Results**	**Key Deliverables**	**Benchmarks**	**Timeframe**
Output A.1.4 Pilot actions build capacity in ICM, demonstrating how ICM can be strengthened at the local level through the empowerment of communities and other actors at demonstration sites (under A.1.2 and A.1.3).				

Activities: A.1.4.1. Support up-scaling and replication of ICM successes and associated capacity building with particular attention to community empowerment and local engagement in planning and decision making at three (3) priority sites.	Guidelines/technical manuals replication of ICM successes at national level produced. Participation of Government officials and community members in consultative workshops /meetings on ICM. Training in ICM and sharing of ICM success stories.	Guidelines/technical manuals replication of ICM successes. Consultative workshops/meetings on ICM Training workshops on ICM. Publication on ICM Successes.	There are no guidelines and manuals for replication of ICM successes. Previous meetings/workshops on ICZM involved only government officials and no communities. Previous meetings/workshops on ICZM involved only government officials and no communities. No publications on ICM Successes.	Y2(Q2) to Y5 (Q1)
Output A.2.1 Economic valuation of at least three (3) key critical coastal and marine habitats including integration of economic valuation to coastal management and planning.				
Activity: A.2.1.1 Development and application of economic evaluation methodologies for at least two (2) critical coastal habitat sites, with particular reference to vulnerable areas (including but not limited to the northern Mozambique Channel and development of major ports).	New methodologies for undertaking economic evaluations of critical habitats. Methodologies for economic valuation of critical coastal snd marine ecosystemso adopted and used in specific EV studies. Experts trained on the application of methodologies for economic valuation of coastal and marine ecosystems.	Methodologies, guidelines or reference manuals for economic valuation of critical coastal and marine habitats and ecosystems. Economic valuation Methodologies/Guidelines. Economic valuation studies. Regional workshops on economic valuation of coastal ecosystems.	No methodologies, guidelines or reference manuals for economic valuation of critical coastal and marine ecosystems. No methodologies, guidelines or reference manuals for economic valuation of critical coastal and marine ecosystems.Economic. Few reports on economic valuation of critical coastal and marine ecosystems. No regional workshops held on economic valuation of coastal and marine ecosystems.	Y2(Q2) to Y3 (Q2)
Output A.2.2 Tools and guidelines for vulnerability assessment and spatial planning supports monitoring and management actions.				
Overall Project Output/Activity	**Expected Results**	**Key Deliverables**	**Benchmarks**	**Timeframe**
Activity: A.2.2.1 Development and adaptation of tools and guidelines for vulnerability assessment at the regional or sub-regional scale (e.g. northern Mozambique Channel) and where necessary develop new guidelines and support their application.	Regional guidelines and methodologies for ecosystems vulnerability assessment and spatial planning developed and applied. Ecosystems vulnerability assessment studies undertaken using regional guidelines.	Regional guidelines and methodologies for ecosystems vulnerability assessment. Ecosystems vulnerability assessment studies.	There are no regional guidelines and methodologies for ecosystems vulnerability assessment. FewReports of Ecos studies done on coastal ecsystems vulnerability.	Y1(Q3) to Y2 (Q2)

Output A.2.3 Sustainable extractive use strategies developed and adopted for specific coastal and marine natural resources.				
Activity: A.2.3.1 Development of extractive use strategies for resources in critical areas and work with communities to implement the strategies.	Alternative livelihood strategies for extraction of coastal and marine natural resources developed and applied.	Alternative livelihood strategies for extraction of coastal and marine natural resources.	No alternative livelihood strategies for extraction of coastal and marine natural resources exist in the region.	Y2(Q2) to Y3 (Q4)
Output A.2.4 Adoption of regional indicators and baseline assessment in support of critical habitat monitoring and management.				
Activity: A.2.4.1. Development of key indicators for assessing management effectiveness and monitoring of the state of critical habitats at regional and national levels and link to the State of the Coasts reporting process.	Regionally agreed indicators and protocol for monitoring the state of coastal and marine ecosystems reviewed and adopted.	Regional indicators and protocol for monitoring the state of coastal and marine ecosystems .	There are no regional indicators and protocol for monitoring the state of coastal and marine ecosystems .	Y2(Q2) to Y3 (Q4)
Activity: A.2.4.2. Establish national modalities for monitoring the state of critical marine and coastal habitats.	The modalities for the monitoring of the coastal and marine ecosystems established in countries	Framework for monitoring of the coastal and marine ecosystems.	.	Y2(Q1) to Y3 (Q4)
Output B.1.1 Cost-effective technologies for municipal wastewater treatment demonstrated in at least 3 sites				
Activity: B.1.1.1 Identification and implementation of wastewater management in-country interventions in association with local stakeholders and monitor the effectiveness of these projects at three (3) priority sites.	Pilot in-country interventions on wastewater treatment implemented in target countries. Appropriate municipal wastewater treatment technologies identified and used.	In-country interventions on wastewater treatment. Appropriate municipal wastewater treatment technologies.	Few in-country interventions on wastewater treatment undertaken under the WIO-LaB Project in Kenya and Tanzania. There is limited application of cost-effective technologies for wastewater treatment.	Y1(Q2) to Y4(Q4)
Overall Project Output/Activity	**Expected Results**	**Key Deliverables**	**Benchmarks**	**Timeframe**
Output B.1.2 Effluents at a minimum of 3 demonstration sites are collected, treated, recycled and/or disposed of in accordance with international best practices.				
Activity: B.1.2.1. Selection and implementation of effluent reduction measures at one (1) priority site in accordance with the international best practices and monitoring of compliance, effectiveness and sustainability.	Effluent reduction measures that are cost-effective, efficient and sustainable are selected and implemented. Generation of effluents is controlled through implementation of effluent reduction measures.	Effluent reduction measures.	There is limited application of effluent reduction measures in most of the countries	Y1(Q3) to Y3(Q4)
Output B.1.3 Pilot actions undertaken to build capacity for water quality management and ICM promoted through empowerment of communities and other actors at the demonstration sites.				
Activity: B.1.3.1. Initiate programmes and actions that empower communities on water quality management.	Communities trained on wastewater management issues and are involved in advocancy and monitoring of the effectivess of wastewater management interventions.	Trained members of communities.	There is very limited involvement of local communities in waste water management.	Y2(Q2) to Y3(Q4)

Output B.2.1 Regionally harmonized framework for monitoring pollution loads and water quality standards developed for receiving coastal waters.				
Activities: B.2.1.1. Review existing standards, regulations and processes at national levels and develop regional standards and guidelines for effective wastewater and effluent monitoring and control in accordance with best practices.	Water quality standards, regulations and processes at national level reviewed and improved. Regional standards and guidelines for effective wastewater and effluent monitoring developed and applied.	Water quality standards and regulations. Regional standards and guidelines	Most countries have national Water quality standards and regulations. There are no regional standards and guidelines for effective wastewater and effluent monitoring.	Y2(Q3) to Y3(Q4)
Activity B.2.1.2. Support the development of national wastewater and effluent control standards and implementation frameworks with particular reference to the implementation of LBSA protocol.	National wastewater and effluent control standards and implementation frameworks developed and applied.	National wastewater and effluent control standards. Guidelines on the implementation of standards.	Most countries have national Water quality standards and regulations. There are no regional guidelines or standards.	Y2(Q3) to Y3(Q4)
Output B.2.2 Regionally harmonized standards and monitoring framework for pollutant loads and effluent and marine water quality standards adopted by at least five (5) countries through participatory national and regional consultations.				
Activities: B.2.2.1 Development and implementation of cost effective water quality monitoring framework in at least three (3) countries.	A cost-effective regional water quality monitoring programme based on harmonised monitoring methodologies, indicators and standards, developed and implemented.	A cost-effective regional water quality monitoring programme. Reports of pollution monitoring programmes	There is no regional water quality monitoring programme based on harmonised monitoring methodologies, indicators and standards.	Y2(Q2) to Y3(Q4)
Output B.2.3 Regulatory and human capacity of national and regional facilities/institutions strengthened to promote implementation of water quality monitoring using regional standards.				
Overall Project Output/Activity	**Expected Results**	**Key Deliverables**	**Benchmarks**	**Timeframe**
Activity: B.2.3.1 Build capacity of countries to implement regional standards and ensure effective processes of monitoring and controlling wastewater and effluent discharges.	Training programmes on the effective process for monitoring and controlling wastewater/effluent discharges, developed and implemented.	Training programmes on the effective monitoring and controlling wastewater/effluent discharges.	Few training programmes on the water quality analysis and pollution monitoring have been held	Y1(Q4) to Y4(Q2)
Output C.1.1 Environmental flow assessments conducted in at least three (3) pilot river basins to determine the environmental, economic and social trade-offs in water allocation and the need for management of river flows with respect to coastal areas.				
Activity: C.1.1.1 Using participatory approaches to identify and support the conducting of comprehensive Environmental flow assessments (EFAs) in selected basins.	National experts conduct EFA studies in selected in river basins using standard regional EFA guidelines and or methodologies.	Environmental flow assessments (EFAs) in selected basins.	No EFA have been carried out in the region except few in South Africa.	Y1(Q3) to Y3(Q3)
Output C.1.2 Implementation of flow assessment recommendations and participatory river basin management approaches yield environmental, economic and/or social benefits as a result of improved river flows to the coast.				

Activity: C.1.2.1 Development and implementation of environmental flow management plans for at least two (2) sub-basins, taking into account the social, environmental and economic trade-offs and the political decisions and change management mechanisms required.	Environmental flow management plans developed and implemented in selected river basins.	Environmental flow management plans.	Few Environmental flow management plans have been developed in few river basins in South Africa. None in the rest of the countries	Y1(Q2) to Y2(Q4)
Output C.2.1 Institutional capacity for implementation of climate sensitive environmental flow assessments enhanced and supported by appropriate guidance, methodologies and networks at both national and regional level.				
Activity: C.2.1.1 Preparation of regional guidelines on EFA and building of regional and national capacity to undertake and update environmental flow assessments (EFAs).	Regional guidelines and or methodologies of EFA developed. National experts are trained on EFA through training workshops.	Regional guidelines and or methodologies of EFA. Training workshops on EFA.	No regional guidelines and or methodologies of EFA exists in the region. Very few experts on EFA.	Y1(Q2) to Y2(Q4)
Activity: C.2.1.2 Pilot development of an institutional and regulatory framework for conjunctive management of river basins and coastal areas	A pilot institutional and regulatory framework developed.	Development of institutional and regulatory framework Reports on process.	There is no such institutional and regulatory framework.	Y1(Q2) to Y2(Q4)
Output D.1.1 ICZM protocol developed and adopted at the regional level.				
Overall Project Output/Activity	**Expected Results**	**Key Deliverables**	**Benchmarks**	**Timeframe**
Activity: D.1.1.1 Finalization of the ICZM protocol and provision of support to participating countries to ratify and implement the protocol at national level.	ICZM Protocol adopted by the Conference of Plenipotentiaries (COP).	ICZM Protocol	ICZM Protocol yet to be adopted by the Conference of Plenipotentiaries (COP).	Y1(Q2) to Y4(Q4)
Activity: D.1.1.2. Build capacity in participating countries for the implementation of the ICZM protocol.	Modalities for the integration of the requirements of the ICZM Protocol into the existing coastal planning and management mechanisms, established. Training of government officials in regional stakeholders training workshop on the implementation of the ICZM Protocol at national level.	Regional ICZM stakeholders training workshop.	There is limited integration of ICZM in coastal management processes.	Y1(Q2) to Y4(Q4)
Output D.1.2 LBSA protocol ratified in at least 4 countries and supported in all countries through the development of policy briefs, model legislation and capacity building to practitioners				

Activity: D.1.2.1. Support country processes for ratification of the LBSA protocol.	Model LBSA legislation and policy briefs on specific and current LBSA issues prepared and presented to practitioners/policy makers through national forums.	Model LBSA legislation. Policy briefs on LBSA issues.	Most of the countries have not specific LBSA legislation. Policy makers are are not fully aware of LBSA issues.	Y1(Q2) to Y4(Q4)
Activity: D.1.2.2 Build capacity in participating countries to implement the LBSA protocol.	Awareness on the LBSA protocol created to policy makers in participating countries through national forums.	Awareness on the LBSA protocol. LBSA protocol.	Policy makers are are not fully aware of LBSA issues. LBSA protocol not ratified.	Y1(Q2) to Y3(Q4)
Output D.1.3 Implementation of the WIO-SAP succeeds at national level through the coordination and guidance of interministerial committees and regional task forces.				
Activities: D.1.3.1. Provision of support to participating countries to monitor WIO-SAP project implementation and also monitor the state of the marine and coastal environment.	Project Management Unit (PMU), national and regional Task Forces, Steering Committee, Inter Ministerial Committee established to suport WIOSAP Project implementation.	Project Management Unit (PMU). National and regional Task Forces. Steering Committee, Inter Ministerial Committee.	Project Management Unit (PMU), national and regional Task Forces, Steering Committee, Inter Ministerial Committee not yet established.	Y1(Q1) to Y1(Q3)
Overall Project Output/Activity	**Expected Results**	**Key Deliverables**	**Benchmarks**	**Timeframe**
Activity D.1.3.2. Presentation of regular and timely reports on the WIO-SAP Project to national inter-ministery coordination committees, ocean policy task forces, water management authorities and other national environmental and marine policy bodies.	National inter-ministerial environmental coordination committees, ocean policy task forces, water management authorities and other national environmental and marine policy bodies, informed on the project.	Reports and Policy briefs on LBSA issues and project activities and outcomes.	Policy makers are are not fully aware of LBSA issues.	Y1(Q2) to Y2(Q2)
OUTPUT D.1.4: Establishment of a funding pipeline to support long-term implementation of the SAP through Nairobi Convention including coordination of stakeholders and facilitation of learning and exchange in support of WIOSAP project implementation.				
Activities: D.1.4.1. Develop capacity of the WIO-SAP project management, coordination of learning and exchange and support for implementation of the Nairobi Convention and other regional legal frameworks.	WIOSAP Project Management Unit and regional Task Forces established within the framework of the Nairobi Convention.	WIOSAP Project Management Unit. Regional Task Forces.	WIOSAP Project Management Unit and regional Task Forces not yet established.	Within the first 3 months of year 1.
Activity: D.1.4.2. Strengthen the capacity of national structures including the Nairobi Convention Focal Points to provide oversee the WIOSAP implementation	NCS National Focal Point Forum, Project Steering Committee and regional Inter-Ministerial Committee strengthened/established toooversee the implementation of the project.	Project Steering Committee. Regional Inter-Ministerial Committee.	Structures for regional coordination of the project not yet established.	Within the first 3 months of year 1.

Activity: D.1.4.3. Support the establishment and operationalisation of regional coordination and implementation structures.	Working groups established and their lead institutions identified for PADH, WSQ, MWM, and EFA.	Lead institutions	Lead institutions for the project working groups yet to be established.	Within the first 3 months of year 1.
OUTPUT D.2.1: Existing Nairobi Convention Clearing House Mechanism expanded to incorporate information on national and regional investments and projects, climate variability and change, guidelines, methodologies and success stories, among others.				
Activities: D.2.1.1. Improvement of the existing Nairobi Convention Clearing House Mechanism to facilitate access to priority policy and technical guidelines, reports, standards and success stories.	The Regional Clearing House Mechanism updated to new information in the WIO Region	Regional Clearing House Mechanism	Clearing House Mechanism exists including the national nodes. The use of CHM is limited.	Y1(Q2) to Y3 (Q4)
Overall Project Output/Activity	**Expected Results**	**Key Deliverables**	**Benchmarks**	**Timeframe**
Activity: D.2.1.2. Development of institutional and financial capacity for sustaining Nairobi Convention knowledge management role and regional stakeholder's platforms and networks.	Government officials and project partners are trained on the operations of the Clearing House Mechanism and create awareness in their countries.	Training workshops on the Clearing House Mechanism.	The use of CHM is limited.	Y1(Q2) to Y3 (Q4)
OUTPUT D.2.2: Established science-policy exchange platform under the Nairobi Convention for policy and for consensus on key LBSA and ICZM issues in the WIO Region.				
Activities: D.2.2.1. Development of a medium-term science for policy programme to: (i) provide scientific advice required for priority policy decisions, (ii) articulate regional LBSA concerns in national, regional and global fora, and (iii) mobilise support for implementation of the WIOSAP project activities and SAP in general.	Science for policy programme is established and policy briefs on LBSA and ICZM issues are presented in scheduled meetings of the RECs' environment, water or marine ministers, including specific meetings between coastal/marine scientists and policy makers.	Science for policy programme.	There is no Science for policy programme under the Nairobi Convention. There is a limited interaction between policy makers and coastal scientists.	Y1(Q1) to Y3 (Q2)
Activity: D.2.2.2. Support regional scientific platforms and networks to coordinate and implement the WIOSAP Project through partnerships, collaboration, specialized centers of excellence and capacity building.	WIO-C, FARI and WIOMSA are supported in order to consolidate the engagement of research institutions and universities as activity centres for the implementation of various activities of the project.	WIO-C, FARI and WIOMSA participates in the project.	WIO-C, FARI and WIOMSA participates in the activities of the Nairobi Convention . Their capacity is limited.	Y1(Q1) to Y3 (Q2)

Activity D.3.1.1 Recruit, establish and operate WIOSAP PMU	The key staff of the WIOSAP Project are recruited within the framework of the Nairobi Convention	Establishment of the WIOSAP PMU WIOSAP PMU Staff onboard	Project Management and Coordination structures not established	Y1(Q1) to Y1 (Q2)
Activity D.3.1.2 Project Steering Committee	Provide oversight functions to the WIOSAP Project	Project Steering Committee established	Regional coordination structures for the project not established	Y1(Q1) to Y1 (Q2)
Activity D.3.2.1 National Implementation Committees	Provide oversight functions to the WIOSAP Project at national level	National Implementation Committees established in each country	National coordination structures for the project not established or are inactive	Y1(Q1) to Y1 (Q2)
Activity D.3.2.2 National Focal Point Institutions	Provide coordination functions to the WIOSAP Project at national level	National Focal Points Institutions engaged in each country	National implementation and coordination structures for the WIOSAP project not established veor are inacti	Y1(Q1) to Y1 (Q2)
Activity D.3.3.1 Mid-Term Evaluation	Establish the status of implementation of the project and suggest remedial measures	Mid-Term Evaluation Report with recommendations	Mid-term evaluation to be undertaken	Y3 (Q1)
Activity D.3.3.2 Terminal Evaluation	Establish the achievements of the project	Terminal Evaluation Report with recommendation	Terminal evaluation to be undertaken	Y4 (Q3)
Activity D.3.3.3 Annual External Audits	Establish the status of financial management of the project on annual basis and suggest remedial measures	Annual Audit Reports with recommendations	Annual Audits to be undertaken	Y1 (Q4) Y2 (Q4) Y3 (Q4) Y4 (Q4)

APPENDIX 7: LINKAGES BETWEEN THE PROJECT COMPONENTS AND OUTCOMES AND SAP ACTIONS

WIO-SAP Component	Main areas of concern in TDA	WIO-SAP Outcome	SAP Actions addressed
Component A: Sustainable management of critical habitats	Problem Area 1: Physical alteration and destruction of habitats	A.1 Using appropriate tools and methodologies, critical habitats managed to enhance ecosystem resilience and the conservation and sustainability of ecosystem services	2.3.2 Management of critical habitats. 1. Incentives to encourage compliance with best practice in critical habitat management established
	Problem Area 1: Physical alteration and destruction of habitats	A.2 Appropriate tools and approaches to integrate economic, social and environmental considerations to support coastal planning and management	2.3.2 Management of critical habitats. 2. Coastal zoning based on integrated economic, social and environmental considerations implemented. 3. Critical habitat management strategies in place in all countries and contributing to ecologically sustainable ecosystem services and regional protection 6 .ICZM legislation in all countries 7. Awareness of the importance of critical habitats raised
Component B: Water quality management	Problem Area 2: Water and Sediment Quality Degeneration due to pollution.	B.1 Quality of coastal receiving waters improved through pilot interventions	2.4.2 : Water Quality 1. Effluent discharge standards developed and regionally harmonised 2. Marine water quality standards/guidelines developed and regionally harmonised. 3. Regional best practice framework models for municipal wastewaters management developed and adapted. 4. Collection, treatment and disposal of effluents undertaken in accordance with regional standards
	Problem Area 2: Water and Sediment Quality Degeneration due to pollution.	B.2 Regulatory Framework for monitoring and management of pollutant loads, effluents and receiving water quality adopted at regional level	2.4.2 Management target: Water Quality 1. Effluent discharge standards developed and regionally harmonised 2. Marine water quality standard developed and regionally harmonised. 3. Regional best practice framework models for municipal wastewaters management developed and adapted. 4. Collection, treatment and disposal of effluents undertaken in accordance with regional standards
Component C: Sustainable management of river flows	Problem Area 3: Alteration of freshwater flows and sediment loads from rivers	C.1 Environmental Flow Assessments (EFAs) underpin the integrated management of river flows and coastal areas and implementation of assessment recommendations strengthens ecosystem resilience	2.5.2: River flows and sediment loads. 1. Awareness of EFA as a tool for wise river basin management raised. 2. Capacity for applying EFA increased amongst key stakeholders 3. EFA conducted and operating rules (EQOs) integrated into river basin management plans for selected basins 4. Methodologies agreed upon and tools developed for coherent application of EFA findings in both freshwater and coastal management
	Problem Area 3: Alteration of freshwater flows and sediment loads from rivers	C.2 Capacity to conjunctively manage river flows and coastal areas strengthened	2.5.2: River flows and sediment loads. 1. Awareness of EFA as a tool for wise river basin management raised. 2. Capacity for applying EFA increased amongst key stakeholders 3. EFA conducted and operating rules (EQOs)

			integrated into river basin management plans for selected basins 4. Methodologies agreed upon and tools developed for coherent application of EFA findings in both freshwater and coastal management
Component D: Governance, learning and exchange	Problems related to governance and awareness	D.1 Updated policies and strong institutions underpin WIO-SAP implementation	2.6.2 Governance and awareness. 1. Capacity for ecosystem based management improved. 2. Appropriate legal and regulatory frameworks for LBSA management in place and implemented at national level. 3. Awareness of the importance of good marine and coastal environment managers raised at the level of policy makers and legislators, civil society and the private sector. 7.Regional knowledge management undertaken effectively
	Problems related to governance and awareness	D.2 Improved knowledge management systems and exchange mechanisms support WIO management, governance and awareness creation	2.6.2 Governance and awareness. 1. Capacity for ecosystem based management improved. 2. Appropriate legal and regulatory frameworks for LBSA management in place and implemented at national level. 3. Awareness of the importance of good marine and coastal environment managers raised at the level of policy makers and legislators, civil society and the private sector. 7.Regional knowledge management

APPENDIX 8: COSTED MONITORING AND EVALUATION (M&E) PLAN

M& E activity	Responsible Parties	Budget	Time frame
1. Inception Workshop and Report	▪ Project Manager ▪ UNEP/GEF • NCS	Indicative cost: **US$**40,000.	To be completed within first 3 months of project start up
2. Determination of Means of Verification of project results.	Project Manager ▪ UNEP/GEF • NCS	Indicative cost: **US$**10,000 (To be finalized in the Inception Workshop).	Start, mid and end of project (during evaluation cycle) and annually when required.
3. Determination of Means of Verification for Project Progress on output and implementation	▪ Project Manager	Indicative cost: **US$**10,000 (To be determined as part of the Annual Work Plan's preparation).	Annually prior to ARR/PIR according to the annual work plans
4. Collection of water quality baseline data of the selected on-the-ground projects	Selected on-the-ground projects	Budget will be in-built in the proposal	First year of implementation
5. Annual Project Reports (APR)	▪ Project Manager	PMU staff time	Annually (31st December of each year)
6. Project Implementation Report (PIR)	▪ UNEP/GEF ▪ Project Manager	PMU staff time	Annually (31st December of each year)
7. Half Yearly Progress reports	▪ Project Manager	PMU staff time	Quarterly (30th June and 31st December of each year)
8. Mid-term Evaluation	• UNEP/GEF	Indicative cost: **US$**40,000	At the mid-point of project implementation.
9. Final Evaluation	• Project Manager • NCS • UNEP/GEF	Indicative cost: **US$**60,000	At least 3 months before the end of the project
10. Project Terminal Report (PTR)	• Project Manager • UNEP/GEF	Indicative cost: **US$**60,000	At least 3 months before the end of the project
11. Lessons Learned	• Project Manager • NCS	Indicative Cost: **US$**20,000 (average **US$**4,000 per year)	Annually by 31st December of each year
12. Audit	• UNEP • UNEP/IW • Project Manager	Indicative cost: **US$**50,000 (10,000 x 5 yrs)	Annually by 31st December of each year
13. Visits to field sites	• NCS • UNEP/IW • National Focal Points • Project Manager	Indicative costs: **US$**70,000 (4 x 500 x 7 x 5)	Annual according to work plan
TOTAL indicative COST		*US$ 360,000*	

Nb: The above budget excludes project team staff time and UNEP NCS staff and travel expenses.

APPENDIX 9: SUMMARY OF REPORTING REQUIREMENTS AND RESPONSIBILITIES

M&E COMPONENT/ ACTIVITY	RESPONSIBILITY ASSIGNMENT		MEANS OF ASSESSMENT/ MONITORING DATA SOURCE
	INSTITUTION/ AGENCY	PROJECT/ AGENCY OFFICER	
MONITORING			
Preparation of the Project Work-plans and budgets plus Risk and IW indicator tables:	• *Regional*: PMU (in consultation with PSC members and approval of UNEP-NCS) • *National*: NFP	• *Regional*: PMU Project Manager with support from UNEP/DEPI Task Managers. • *National*: NFP/APNC with support from NICs &RACs	• Project Document. • Resolutions of the RPSC Meetings.
Preparation of Progress Reports:	• *Regional*: PMU. • *National*: NFP	• *Regional*: PMU Project Manager. • *National*: NFP/ANC	• *Regional*: PMU Reports • *National*: National Activity Reports
Preparation of Expenditure Statements (including co-financing):	• *Regional*: PMU, UNEP-FMO • *National*: NFP	• *Regional*: PMU Project Manager. • *National*: NFP/ANPC	• *Regional*: PMU Reports • *National*: National Activity Reports
Preparation of counterpart contribution reports:	• *Regional*: PMU. • *National*: NFP	• *Regional*: PMU Project Manager. • *National*: NFP/ANPC	• *Regional*: PMU Reports • *National*: National Activity Reports
On-site supervision of Project Activities:	• *Regional*: PMU. • *National*: NFP	• *Regional*: PMU Project Manager. • *National*: NFP/ANPC	• On-site data collection
Executing Agencies Supervision Missions:	• PMU and UNEP/NCS	• PMU and UNEP/NCS	• On-site data collection • Mission reports
Implementing Agencies supervision missions:	• UNEP/DEPI	• UNEP/DEPI Task Manager	• On-site data collection • Mission reports

M&E COMPONENT/ ACTIVITY	RESPONSIBILITY ASSIGNMENT		MEANS OF ASSESSMENT/ MONITORING DATA SOURCE
	INSTITUTION/ AGENCY	PROJECT/ AGENCY OFFICER	
EVALUATION			
Meetings of the PSC:	• PMU	• PMU Project Manager • DEPI and UNEP/NCS • UNEP/DEPI Task Managers	• Minutes of the PSC meetings
Mid-Term Evaluation (MTE):	• UNEP-DEPI in consultation with UNEP NCS, the PMU, National Governments and participating institutions and stakeholders	• Independent consultant	• On-site data collection • Consultant's Report
Terminal Evaluation (TE):	• UNEP-DEPI in consultation with UNEP NCS, the PMU, National Governments and participating institutions and stakeholders	• Independent consultant	• On-site data collection • Consultant's Report
Project Implementation Reviews (PIR):	• UNEP-DEPI in consultation with UNEP NCS, the PMU, National Governments and participating institutions and stakeholders	• UNEP –DEPI Task Manager	• On-site data collection • PIR reports
Annual Project Reviews (APRs):	• UNEP-DEPI in consultation with UNEP NCS, the PMU, National Governments and participating institutions and stakeholders	• UNEP –GEF Task Manager, PMU Project Manager	• On-site data collection • PIR reports

APPENDIX 10: STANDARD TERMINAL EVALUATION TERMS OF REFERENCE

1. Objective and Scope of the Evaluation

The objective of the terminal evaluation is to examine the extent and magnitude of any project impacts and determine the likelihood of future impacts. The evaluation also assesses project performance and the implementation of planned project activities and planned outputs against actual results.

2. Methods

This terminal evaluation will be conducted as an in-depth evaluation using a participatory approach whereby the UNEP/GEF Task Manager, key representatives of the executing agency and other relevant staff are kept informed and consulted throughout the evaluation. The consultant will liaise with the UNEP Evaluation Office and the UNEP/GEF Task Manager on any logistic and/or methodological issues to properly conduct the review in as independent a way as possible, given the circumstances and resources offered. The draft report will be circulated to UNEP/GEF Task Manager and key representatives of the executing agencies by the UNEP Evaluation Office. Any comments or responses to the draft report will be sent to the UNEP Evaluation Office for collation and the consultant will be advised of any necessary or suggested revisions.

The findings of the evaluation will be based on the following:

i) A desk review of project documents including, but not limited to:

(a) The project documents and monitoring and evaluation reports (such as progress and financial reports to UNEP, GEF annual Project Implementation Review reports and Report on the Mid-Term Review of the Project) and relevant correspondence.
(b) Notes from the Project Steering Committee meetings.
(c) Technical reports and outputs (toolkits, outputs and reports of the in-country interventions, etc.)
(d) Other project-related material produced by the project staff or partners.
(e) Relevant material published on the project web-site.

ii) Interviews with project management (such as Project Coordinators, the Executing Agency, UNEP/NCS, etc.).

iii) Interviews with the UNEP/GEF Project Task Manager and Fund Management Officer, and other relevant staff in UNEP as necessary. The Consultant shall also gain broader perspectives from discussions with relevant GEF Secretariat staff.

iv) Consultations with project staff and key stakeholder groups, especially non-governmental and private sector partners, during the Conference of Parties to the Nairobi Convention and related expert meetings, to consult with relevant stakeholders, including the members of the project Steering Committee and partner NGOs and national and international organizations that are expected to be present.

v) A desk study of all in-country interventions based on an assessment of the original Terms of Reference, actual implementation of activities, progress reports and realised outcomes. Where needed, the consultant may liaise with each project team by e-mail or by telephone.

vi) Field visits to project locations in all participating countries (Comoros, Kenya, Madagascar, Mauritius, Mozambique, Seychelles, South Africa, and Tanzania). Specific focus of attention during these field visits will be the national in-country interventions. In this regard, the

evaluation will cover specifically a review of the performance and impacts of these projects, as well as the principal lessons learnt thereof. While all projects will be covered, the Consultant, in consultation with PMU will select a number of projects, based on geographical and thematic spread, for thorough analysis.

vii) Interviews and telephone interviews with intended users for the project outputs and other stakeholders involved with this project, including in the participating countries and international bodies. Interviews with other stakeholders, including NGOs which participated in the project. The Consultant shall determine whether to seek additional information and opinions from representatives of donor agencies and other organisations. As appropriate, these interviews could be combined with an email questionnaire.

3. Project Ratings

The success of project implementation will be rated on a scale from 'highly unsatisfactory' to 'highly satisfactory'. In particular the evaluation shall assess and rate the project with respect to the eleven categories defined. It should be noted that many of the evaluation parameters are interrelated. For example, the achievement of objectives and planned results is closely linked to the issue of 'sustainability'. Sustainability is understood as the probability of continued long-term project-derived outcomes and impacts and is, in turn, linked to the issues of 'catalytic effects / replication' and often, 'country ownership' and 'stakeholder participation'.

A. Attainment of objectives and planned results:

The evaluation should assess the extent to which the project's major relevant objectives were effectively and efficiently achieved or are expected to be achieved and their relevance.

Effectiveness: Evaluate the overall likelihood of impact achievement, taking into account the ―achievement indicators, the achievement of outcomes and the progress made towards impacts. UNEP's Evaluation Office advocate the use the Review of Outcomes to Impacts (ROtI) method to establish this rating

Relevance: In retrospect, were the project's outcomes consistent with the focal areas/operational program strategies? Ascertain the nature and significance of the contribution of the project outcomes to the wider portfolio of the GEF.

Efficiency: Was the project cost effective? Was the project the least cost option? Was the project implementation delayed and if it was, then did that affect cost-effectiveness? Assess the contribution of cash and in-kind co-financing, and any additional resources leveraged by the project, to the project's achievements. Did the project build on earlier initiatives; did it make effective use of available scientific and/or technical information? Wherever possible, the evaluator should also compare the cost-time vs. outcomes relationship of the project with that of other similar projects.

B. Sustainability:

Sustainability is understood as the probability of continued long-term project-derived outcomes and impacts after the GEF project funding ends. The evaluation will identify and assess the key conditions or factors that are likely to contribute or undermine the persistence of benefits after the project ends. Some of these factors might be outcomes of the project, e.g. stronger institutional capacities or better informed decision-making. Other factors will include contextual circumstances or developments that are not outcomes of the project but that are relevant to the sustainability of outcomes. The evaluation should ascertain to what extent follow-up work has been initiated and how project outcomes will be sustained and enhanced over time. Application of the ROtI method will also assist in the evaluation of sustainability.

Five aspects of sustainability should be addressed: financial, socio-political, institutional frameworks and governance and environmental (if applicable). The following questions provide guidance on the assessment of these aspects:

Financial resources. Are there any financial risks that may jeopardize sustenance of project outcomes and onward progress towards impact? What is the likelihood that financial and economic resources will not be available once the GEF assistance ends? To what extent are the outcomes and eventual impact of the project dependent on continued financial support?

Socio-political: Are there any social or political risks that may jeopardize sustenance of project outcomes and onward progress towards impacts? What is the risk that the level of stakeholder ownership will be insufficient to allow for the project outcomes to be sustained? Do the various key stakeholders see that it is in their interest that the project benefits continue to flow? Is there sufficient public/stakeholder awareness in support of the long term objectives of the project?

Institutional framework and governance. To what extent is the sustenance of the outcomes and onward progress towards impacts dependent on issues relating to institutional frameworks and governance? What is the likelihood that institutional and technical achievements, legal frameworks, policies and governance structures and processes will allow for, the project outcomes/benefits to be sustained? While responding to these questions consider if the required systems for accountability and transparency and the required technical know-how are in place.

Environmental. Are there any environmental risks that can undermine the future flow of project environmental benefits? The TE should assess whether certain activities in the project area will pose a threat to the sustainability of the project outcomes.

C. Catalytic Role and Replication

The catalytic role of the GEF is embodied in its approach of supporting the creation of an enabling environment, investing in activities which are innovative and show how new approaches and market changes can work, and supporting activities that upscale new approaches to a national (or regional) level to sustainably achieve global environmental benefits. The three categories approach combines all the elements that have been shown to catalyze results in international cooperation. Evaluations in the bilateral and multilateral aid community have shown time and again that activities at the micro level of skills transfer—piloting new technologies and demonstrating new approaches—will fail if these activities are not supported at the institutional or market level as well. Evaluations have also consistently shown that institutional capacity development or market interventions on a larger scale will fail if governmental laws, regulatory frameworks, and policies are not in place to support and sustain these improvements. And they show that demonstration, innovation and market barrier removal do not work if there is no follow up through investment or scaling up of financial means.

In general this catalytic approach can be separated into are three broad categories of GEF activities:

(1) **—foundational** and enabling activities, focusing on policy, regulatory frameworks, and national priority setting and relevant capacity; (2) **demonstration** activities, which focus on demonstration, capacity development, innovation, and market barrier removal; and (3) **investment** activities, full-size projects with high rates of co-funding, catalyzing investments or implementing a new strategic approach at the national level.

D. Country ownership/driveness:

This is the relevance of the project to national development and environmental agendas, recipient country commitment, and regional and international agreements. The review will: Assess the level of country ownership. Specifically, the evaluator should assess the countries' level of commitment.

E. Stakeholder participation/public awareness:

This consists of three related and often overlapping processes: information dissemination, consultation, and stakeholder participation. Stakeholders are the individuals, groups, institutions, or other bodies that have an interest or stake in the outcome of the GEF- financed project. The term also applies to those potentially adversely affected by a project. The evaluation will specifically:

- Assess the mechanisms put in place by the project for identification and engagement of stakeholders in each participating country and establish, in consultation with the stakeholders, whether this mechanism was successful, and identify its strengths and weaknesses.
- Assess the degree and effectiveness of collaboration/interactions between the various project partners and institutions during the course of implementation of the project.
- Assess the degree and effectiveness of any various public awareness activities that were undertaken during the course of implementation of the project.

F. Achievement of outputs and activities:

- Assessment of the project‘s success in producing each of the programmed outputs, both in quantity and quality as well as usefulness and timeliness.
- Assess the relevance of the outputs with respect to the achievement of the desired outcomes. Were all the outputs necessary? Were the outputs and activities sufficient to achieve the desired outcomes?

G. Assessment monitoring and evaluation systems.

The evaluation shall include an assessment of the quality, application and effectiveness of project monitoring and evaluation plans and tools, including an assessment of risk management based on the assumptions and risks identified in the project document. The Terminal Evaluation will assess whether the project met the minimum requirements for ‘project design of M&E’ and ‘the application of the Project M&E plan’. GEF projects must budget adequately for execution of the M&E plan, and provide adequate resources during implementation of the M&E plan. Project managers are also expected to use the information generated by the M&E system during project implementation to adapt and improve the project.

M&E during project implementation

M&E design. Projects should have sound M&E plans to monitor results and track progress towards achieving project objectives. An M&E plan should include a baseline (including data, methodology, etc.), SMART indicators and data analysis systems, and evaluation studies at specific times to assess results. The time frame for various M&E activities and standards for outputs should have been specified.

Budgeting and Funding for M&E activities. The terminal evaluation should determine whether support for M&E was budgeted adequately and was funded in a timely fashion during implementation.

H. Preparation and Readiness

Were the project's objectives and components clear, practicable and feasible within its timeframe? Were the capacities of executing institution and counterparts properly considered when the project was designed? Were lessons from other relevant projects properly incorporated in the project design? Were the partnership arrangements properly identified and the roles and responsibilities negotiated prior to project implementation? Were counterpart resources (funding, staff, and facilities), enabling legislation, and adequate project management arrangements in place?

I. Implementation approach:

This includes an analysis of the project's management framework, adaptation to changing conditions (adaptive management), partnerships in implementation arrangements, changes in project design, and overall project management. The evaluation will:

- Ascertain to what extent the project implementation mechanisms outlined in the project document have been closely followed. In particular, assess the role of the various committees established and whether the project document was clear and realistic to enable effective and efficient implementation, whether the project was executed according to the plan and how well the management was able to adapt to changes during the life of the project to enable the implementation of the project.
- Evaluate the effectiveness and efficiency and adaptability of project management and the supervision of project activities / project execution arrangements at all levels (1) policy decisions: Steering Group; (2) day to day project management.
- Identify administrative, operational and/or technical problems and constraints that influenced the effective implementation of the project.
- Evaluate the effectiveness and efficiency and adaptability of the management of project activities or project execution arrangements at all levels.

J. Financial Planning

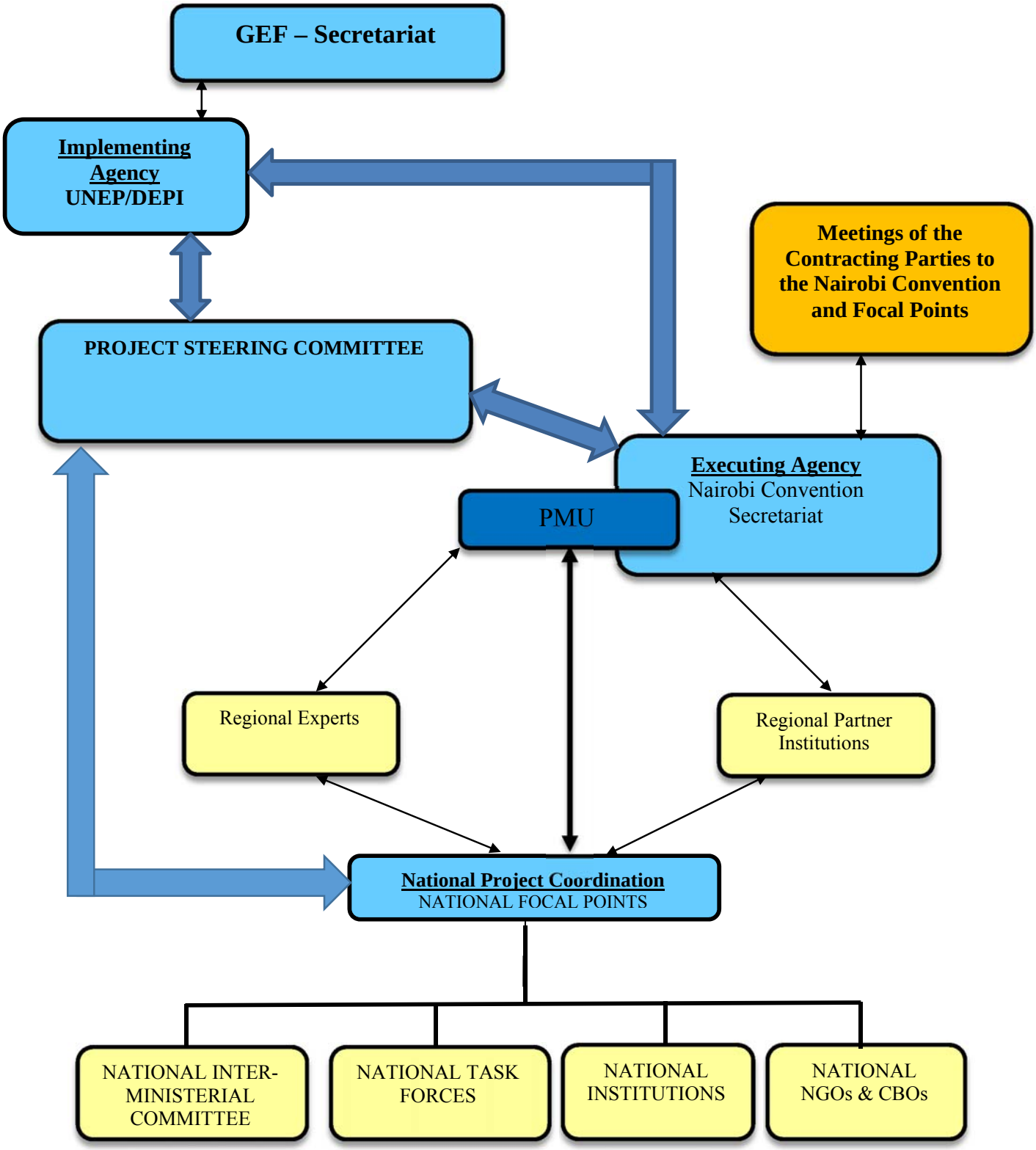
Evaluation of financial planning requires assessment of the quality and effectiveness of financial planning and control of financial resources throughout the project's lifetime. Evaluation includes actual project costs by activities compared to budget (variances), financial management (including disbursement issues), and co- financing. The evaluation should:

- Assess the strength and utility of financial controls, including reporting, and planning to allow the project management to make informed decisions regarding the budget and allow for a proper and timely flow of funds for the payment of satisfactory project deliverables.
- Present the major findings from the financial audit if one has been conducted.
- Identify and verify the sources of co- financing as well as leveraged and associated financing (in co-operation with the IA and EA).
- Assess whether the project has applied appropriate standards of due diligence in the management of funds and financial audits.
- The evaluation should also include a breakdown of final actual costs and co-financing for the project prepared in consultation with the relevant UNON/DEPI Fund Management Officer of the project.

K. UNEP Supervision and Backstopping

The purpose of supervision is to work with the executing agencies in identifying and dealing with problems which have arisen during implementation of the project itself. Such problems may be related to project management but may also involve technical/substantive issues in which UNEP has a major contribution to make. The evaluator should assess the effectiveness of supervision and administrative and financial support provided by UNEP/DEPI.

APPENDIX 11:DECISION-MAKING FLOWCHART AND ORGANOGRAM



APPENDIX 12: TERMS OF REFERENCE OF PROJECT STEERING COMMITTEE

The Project Steering Committee (PSC) will be composed of senior government officials chosen by the participating governments to act as the National Focal Points for the Nairobi Convention and the GEF Project, or their designees. PSC membership will also include UNEP/DEPI, UNEP/GPA and the UNEP/Nairobi Convention Secretariat. Key partners such as the WIO-C, COI and other economic commissions such as SADC will also be invited as observers. Additional members can be included at the discretion of the PSC and these may include Chairs of the Task Forces and Working groups.

The PSC shall be convened annually. Ad hoc meetings may be convened (i) if the majority of members make a request for such a meeting to the UNEP-GEF WIO-LaB Project Office; (ii)At the request of the UNEP-GEF WIO-SAP Project Office when circumstances demand. The PSC will be chaired by an elected senior government official from the participating countries. The term of office of the chairman will be limited to one-year. In addition, a rapporteur for the meeting will be elected.

The Project Manager will serve as the Secretary to the PSC. The WIOSAP PSC will also act as the PSC for any other projects that are incorporated under the WIO SAP umbrella. The WIOSAP PSC will make decisions based on the consensus principle.

Specifically, the WIOSAP PSC will have the following responsibilities:

a) Provide guidance, as well as overall strategic policy and management direction to the Project;

b) Annually, review and assess the progress of the project, based upon a pre-defined Monitoring and Evaluation Plan, including progress made towards making measurable impacts in terms of improvement of environmental status;

c) Discuss and review draft strategies for improving sustainability of environmental benefits and replication drafted by the project unit;

d) Monitoring and reviewing of co-financing delivered to the project in line with GEF requirements;

e) Annually review and approve the work plan and comment on the budgets of the project, and provide strategic direction on the work plan;

f) Advice on appropriate mechanisms for interaction with the private sector;

g) Seek additional funding to support the outputs and activities of the WIOSAP project;

h) Review the extent and effectiveness of stakeholder involvement at the regional and national level particularly among different sectors of government that have an interest or impact in land based activities, including resolution of potential conflicts;

i) Review the quality of outputs produced;

j) Review/monitor the implementation of the project's outreach and communication strategy.

APPENDIX 13: TERMS OF REFERENCE FOR LEGAL AND TECHNICAL TASK FORCE

The Regional Legal and Technical Review Task Force will be established in order to facilitate the achievement of the regional tasks under Components of the WIOSAP Project document. The Regional Legal and Technical Review Task Force of the WIOSAP Project shall consist of one legal and one technical expert nominated by the governments of each participating country, together with one member of the WIOSAP PMU and selected regional experts or consultants.

The membership of the Task Force shall be formally established at the first meeting of the Task Force, which shall elect a Chairperson, alternate Chairperson and a Rapporteur from amongst its members for the duration of the WIOSAP project. The positions of Chairperson, Alternate Chairperson and Rapporteur will be country positions rather than individual positions.
The Chairperson of the Regional Legal and Technical Review Task Force will represent the Regional Legal Task Force on the WIOSAP Project Steering Committee.

Specifically, the Regional Legal and Technical Review Task Force will have the following specific responsibilities:

1. Receive from the WIOSAP Project Management Unit and study the following documents: -

   (i) Drafts of the new Protocol to the Nairobi Convention on Integrated Coastal Zone Management (ICZM). (The ICZM Protocol to be finalised within the framework of implementation of the WIOSAP Project 2015-2020).

   (ii) Regional and National Reports on national legislation, regulatory and institutional frameworks they affect the implementation of the ICZM Protocol and LBSA Protocol.

   (iii) Regional and National Reports on the Review of Status of Ratification and/or Implementation of LBSA Protocol and plans for provision of support in the ratification and/or implementation of LBSA and ICZM Protocols.

2. Exhaustively deliberate on the above documents in plenary, committee or otherwise, with a view to achieving broad agreement and consensus with respect to items 1 (i), (ii), (iii), and (iv) above, and to this end, endeavour to achieve full participation by relevant regional stakeholders;

3. Coordinate, facilitate, guide and oversee the National Legal Task Forces in the execution of their tasks;

4. Propose to the WIOSAP Project Steering Committee or Conference of Plenipotentiaries or Conference of Parties as appropriate, the final drafts of the instruments in item (i) above for adoption and other action as necessary;

5. Review the development of the relevant MEAs, including the UNCLOS Implementation agreements, and to discuss how these emerging international agreements and decisions should be internalised in the Nairobi Convention.

6. Perform any other tasks relevant to the above terms of reference as may be assigned from time to time by the WIOSAP Project Steering Committee.

APPENDIX 14: TERMS OF REFERENCE OF THE WASTEWATER MANAGEMENT TASK FORCE

A Regional Wastewater Management Task Force (WWM TF) will be established in order to facilitate the achievement of the regional goals and objectives in the area of wastewater management. The overall responsibility of WWM TF will include:

- To ensure effective implementation of activities defined in WWM related components of the project;
- Co-ordination of the work of the National WWM TF /coordination mechanisms in each of the participating countries; and
- To provide a mechanism for exchange of information and experience of wastewater management activities, including overseeing the implementation of in-country interventions in target countries.

The Regional WWM TF of the UNEP-GEF WIOSAP Project shall consist of experts nominated by the governments of each participating country, together with one member of the WIOSAP PMU and selected regional experts or stakeholders.

The membership of the Task Force shall be formally established at the first meeting of the Task Force which shall elect a Chairperson and a Reporter from amongst its members.

The Chairperson of the WWM TF will represent the Regional WWM TF on the WIOSAP Project Steering Committee (PSC).

The Regional WWM Task Force shall have the following specific responsibilities:

1. Facilitate the development of a coherent regional vision and strategy for work on municipal wastewater management within the context of environmentally sustainable development;

2. Encourage each country to build a constituency for work on WWM among formal and informal stakeholders, including governments, management authorities, private sector, communities and encourage dialogue between collaborators;

3. Provide and facilitate access to technical advice and information across all levels of work on municipal wastewater management, including the adoption of appropriate wastewater management technologies and effluent reduction measures.

4. Develop regional Guidelines, Best Practices and Procedures for municipal wastewater management;

5. Provide and facilitate access to technical advice and information across all levels of work on in-country interventions of municipal wastewater and effluent management, including setting the criteria for selection of in-country interventions;

6. Provide advice on the strengthening of the legal and institutional framework at all appropriate levels of the management of municipal wastewater and effluents.

7. Establish modalities of replicating the in-country interventions on municipal wastewater / effluent management using cost-effective technologies.

8. Support the development and implementation of regional water quality/pollution monitoring programme;

9. Facilitate and support the identification of capacity building needs, and the implementation of training activities related to wastewater management for different categories of stakeholders, including legislators, decision makers, private sector and community groups;

10. Facilitate and support the development of relevant environmental education and awareness raising programmes related to municipal wastewater and effluent management;

11. Identify, review and propose ways of strengthening regional/national public-private partnerships in municipal wastewater and effluent management; and

12. Provide advice and assist in fundraising for implementation of municipal wastewater management related activities and/or projects that will benefit the region and individual countries.

APPENDIX 15: TERMS OF REFERENCE OF THE PADH TASK FORCE

A Regional PADH Task Force will be established in order to facilitate the achievement of the regional goals and objectives. The overall responsibility of the Regional Task Force for the Physical Alterations and Destruction of Habitats (PADH) will include:

(1) to ensure effective implementation of activities defined in component A of the project;

(2) co-ordination of the work of the national PADH Task Force or other national coordination and implementation mechanisms in each of the participating countries; and

(3) to provide a mechanism for exchange of information and experience on critical habitats management activities, including overseeing the implementation of in-country interventions in target countries.

The Regional PADH Task Force of the UNEP-GEF WIOSAP Project shall consist of nominated National PADH experts, together with one member of the Project Office and selected regional experts. The members should represent the key priority sectors (e.g., tourism, aquaculture, port and harbour development, mining, etc.) which have been identified as having most significant impact on physical alterations and destruction of habitats. The membership of the Task Force shall be formally established at the first meeting of the Task Force, which shall elect a Chairperson and a Vice-Chair from amongst its members. The Vice-Chair shall act as Chairperson of meetings in the absence of the Chairperson.

The Chairperson of the Regional PADH Task Force will represent the Regional Task Force on the WIOSAP Project Steering Committee (PSC) as an observer.

The Regional PADH Task Force shall ensure effective co-ordination of the work and co-operation among the National PADH committees in participating countries, to ensure effective implementation of activities defined in the Component A of the project.

The Regional PADH Task Force shall have the following specific responsibilities:

a. Support relevant national coordination and implementation mechanisms for PADH responses;

b. Facilitate and promote incorporation of the PADH key sectoral principles into the national legislation, and project/programme planning.

c. Provide guidance on the criteria for the selection and implementation of in-country interventions on the restoration of coastal and marine ecosystem;

d. Identify, review and propose ways of strengthening regional/national public-private partnerships in the management of the PADH;

e. Assist in fundraising for the implementation of various PADH related activities and/or projects that will benefit the region and individual countries.

f. Monitor lessons in the implementation of selected in-country interventions on the restoration of critical coastal ecosystems in participating countries and advice on the strategies of replicating the same in the region;

g. Encourage each country to build a constituency for work on PADH among formal and informal stakeholders, including governments, management authorities, private sector, communities, and facilitating dialogue between collaborators on PADH issues;

h. Provide and facilitate access to technical advice across all levels of work on PADH, including development of regional Guidelines, Best Practice and Procedures;

i. Identify and review capacity building needs related to the management of PADH for different categories of stakeholders, including legislators, decision makers, private sector and community groups, and propose appropriate training modules and programmes that need to be developed;

j. Provide support in the development of relevant environmental education programmes and public awareness information materials related to PADH in close collaboration with the national project coordination and implementation mechanisms;

k. Review reports, data and information from the national coordination and implementation mechanisms on PADH and oversee the compilation of regional syntheses regarding management needs and priorities;

l. Evaluate the progress in implementation of the Component A of the project, and provide guidance for improvement when necessary; and;

m. Develop annual workplans and provide periodic progress reports to the WIOSAP Project Steering Committee.

APPENDIX 16: TERMS OF REFERENCE FOR WIOSAP PROJECT MANAGEMENT UNIT

A UNEP-GEF WIOSAP Project (Management Unit PMU) will be established within the Nairobi Convention Secretariat in Nairobi. The PMU consists of a Project Manager, Scientific/Technical Officer, Policy/Governance Officer and an Administrative/Financial Assistant. The Secretariat for the Nairobi convention will support the PMU in the execution of the project activities.

The WIOSAP PMU will be responsible for managing daily activities of the project. UNEP/GEF will provide oversight to the implementation of activities as listed in the GEF Project Document. The PMU will report to the Executing and Implementing Agencies and will be responsible for the implementation of activities as defined in the project document, which are based on priorities identified under the Nairobi Convention, and will be working under the framework of GEF operations of UNEP. The PMU will be physically located at the offices of the Nairobi Convention.

In accordance with the project document, the Project Management Unit will assume the following specific responsibilities:

- Perform project management role for the WIOSAP project;
- Create detailed TORs for all regional consultants, international consultants, and subcontracts in close coordination with NCS;
- Assist the Executing Agency in hiring the consultants and subcontractors, by providing technical review of qualifications;
- Create an annual detailed work plan for adoption by the Project Steering Committee;
- Track the work plan using project management software such as Microsoft Project, and manage actively to correct deficiencies in project progress;
- Serve as Secretariat to the Project Steering Committee;
- Liaise with the implementing and executing agencies, and with other international partners and participants;
- Review and approve all final work products;
- Prepare a semi-annual project newsletter for broad distribution within the region;
- Liaise with other GEF and non-GEF projects in the region, to assure synergy and minimize overlap
- In collaboration with the NCS and the countries, develop project pipelines aiming at raising additional resources for implementation of the WIOSAP project activities.

APPENDIX 17: TERMS OF REFERENCE OF PROJECT MANAGEMENT STAFF

Terms of Reference for Project Manager
P4/P5 (budget line 1101)

1. Overall responsibility:

The overall responsibility of the Project Manager is effective management of the UNEP/GEF WIOSAP Project entitled "*Implementation of the Strategic Action Programme for the protection of the Western Indian Ocean from land-based sources and activities*(WIO-SAP)" in accordance with the signed Project Document, with a view to timely and proper implementation of the Project in its entirety.

The project has a strong partnership between the countries of the WIO region, UNEP, GEF and the Nairobi Convention Secretariat, consequently the Project Manager will maintain a strong involvement of the supporting partners in the project execution

2. Duties and Responsibilities:

Under the guidance of the head of the Nairobi Convention Secretariat, the Project Manager will in particular be responsible for the implementation of the UNEP/GEF WIO-SAP project in close consultation with UNEP/NCS and GEF. Project Manager shall specifically ensure that the activities specified within the project document are carried out in such a manner as to achieve the objectives specified in the project document, and assist national institutions in the region to perform the roles assigned to them. In general terms the Project Manager shall undertake the following:

- Consult periodically within UNEP, and with other partners on issues relevant to the project, as well as matters related to the administrative and financial arrangements in connection with the project;

- Consult regularly with UNEP, UNON and the Secretariat for the Nairobi Convention on administrative and policy matters in order to reflect UNEP's policy in the execution of the project;

- Maintain close liaison with member states of the Eastern African Region participating in the project, and plan through correspondence with the designated national institutions of member states the activities delegated to the institutions, and assist them on implementation of the activities;

- Liaise with relevant inter-governmental and United Nations agencies and other partners e.g., World Bank, IUCN, WWF etc. working in the region, in order to ensure efficient implementation and use of outputs of the project;

- Develop other activities, which will enhance the objectives of the project, and present the same to the UNEP Secretariat of the Nairobi Convention for consideration.

More specifically, the Project Manager will:

i. Develop systems and processes necessary for the tracking, planning and execution of the project.

ii. Identify project priority activities and their related costs within the countries of the region;

iii. Request technical/legal/policy information on the implementation of the project through the Nairobi Convention Focal Points;

iv. Monitor the project implementation at all stages, including the analysis of implementation difficulties and initiating remedial actions, as well as monitoring of the mid-term review and facilitation of the terminal independent evaluation;

v. Liaise with the Co-executing Agencies, Steering Committee, UNEP, GEF and other donors;

vi. Oversee and maintain liaison between all parties concerned with the project to facilitate any changes or modifications and to facilitate resolution of project problems;

vii. Organise and supervise expert meetings, interagency consultations and training workshops or seminars as required by the project;

viii. Prepare working documents for discussion at the meetings of task teams and working groups;

ix. Prepare draft reports on the status of the implementation of the project at the regional level, focusing on gaps to be filled;

x. Prepare TORs for consultancy contracts and monitoring of their execution;

xi. Present the six-monthly Cash Advance Request with substantiation for the GEF funds for the Project to UNEP;

xii. Present detailed draft annual work plans on the Project implementation and of the required financing to be approved by the Steering Committee;

xiii. Undertake technical approval of candidates for consultancy contracts with local and international experts and supervision of their work;

xiv. Ensure the preparation of substantive, financial and other Project reports stipulated under the Project for submission to UNEP;

xv. Ensure completion of deliverables and adherence to timelines; analyse and resolve issues that have the potential to jeopardise performance and/or ability to meet agreed upon deliverables; analyse financial and operational reports;

xvi. Undertake any other tasks as may be assigned to him/her in the field of his/her competence.

3. Job requirements:

- A postgraduate university degree in the field of environmental sciences or marine sciences, preferably at PhD level.

- At least a minimum of 20 years of relevant professional and working experience in organizations with mandate or relevancy to the coastal and marine environment.

- Must have an excellent technical documents writing skills evidenced by extensive publications in regional and international journals.

- High level of fluency in written and spoken English and a working knowledge in French.

- Familiarity with UNEP and GEF systems demonstrated by participation in a large GEF-UNEP agency supported project in the WIO region.

- Demonstrated experience in the management of large regional international water projects including budget planning, financial management, monitoring and evaluation.

- Ability to use computers and related software for data management, information management and retrieval, as well as word-processing and project fund management using spreadsheets.

- Good knowledge of the countries of the WIO region and the Nairobi Convention and its Action Plan, including also national coastal and marine-related institutions in the WIO region;

- Familiarity with the key networks and stakeholders working on issues related to coastal and marine environment in the WIO region.

- In-depth experience in project design and formulation according to UNEP–GEF specifications.

- Training in project management would be an added advantage.

4. Type of contract:

Contract with the Project Manager will be for five (5) years for the duration of the Project.

5. Supervision to the post:

The work of the Project Manager Post will be supervised by the head of the Nairobi Convention Secretariat and the Steering Committee. More specifically, the Nairobi Convention Secretariat will be responsible for supervising all technical and substantive issues of the project while UNEP will supervise and provide guidance on all administrative issues.

Terms of Reference for the Project Technical Officer/Scientist
P3/P4 (budget line 1102)

1. Overall responsibility

The overall responsibility of the Project Officer/Scientist is to assist the Project Manager and co-ordinate actions for effective management of the UNEP/GEF WIOSAP project in accordance with the Project Document, with a view to ensuring timely and proper implementation of the Project in its entirety.

2. Duties and responsibilities

- Follow-up of the implementation of all activities specified in the Project Document and their timely completion;
- Preparation of materials for detailed annual work plans and the follow-up of their implementation;
- Facilitating distribution and, when required, publication of substantive reports and other materials resulting from Project activities;
- Assist in drafting of work plans for implementation of the project in the selected countries and service all meetings under the project;
- Assist in organizing meetings to be held in the framework of the Project and prepare detailed reports of meetings/workshops;
- Assist in financial and administrative matters including necessary coordination within UNEP; follow up on Personnel, Fund, Finance, Travel and General Services issues and with implementing agencies, participating countries and focal points;
- Drafting of MOUs with collaborating agencies and partners obtain technical inputs from relevant officers, checks and verifies the proposal and cost estimates received from countries;
- Assist in the preparation of Terms of reference for consultants, progress reports, annual reports, half-yearly reports on status of implementation, annual budget reports and ad-hoc financial reports as and when requested;
- Prepare working documents for regional task teams and working groups;
- Review all technical reports prepared and submitted to the Project Management Unit by consultants, national and regional institutions and provide feedback.
- Review all proposals for the in-country interventions prepared and submitted to the Project Management Unit by national and regional institutions, NGOs, CBOs and provide feedback.
- Review all technical guidelines, standards, manuals, best practices documents, management plans, etc. submitted to the Project Management Unit by national and regional institutions, experts, NGOs, CBOs and provide feedback for their improvement.
- Perform any other tasks which the Project Manager may deem necessary for the Project implementation.

3. Job requirements:

- A postgraduate university degree in environmental science, marine science or social sciences or its equivalent, preferably at PhD level;
- At least 15 years working experience in a national organization of which at least 5 years must have been in a regional or international project focused on coastal and marine environment;
- Must have an excellent technical documents writing skills evidenced by publications in regional and international journals;
- Conversant with the national and regional processes in the WIO region related to the sustainable management of coastal and marine environment;
- Good knowledge and familiarity with the GEF and the UNEP system.
- Fluency in English with a working knowledge of French;
- Ability to use computers in project management and experience in project proposal and project report writing.
- Must have excellent organizational and communication skills;
- Must have an ability to take initiatives, prioritise workload and work under pressure.
- Training and experience in project management would be an added advantage.

4. Type of contract:

Contract with Project Officer/Scientist will be five (5) years for the duration of the Project

5. Supervision to the post:

The work of the Project Officer/ Scientist will be supervised by the Project Manager.

Terms of Reference for the Project Policy/Governance Officer
P3/P4 (budget line 1103)

1. Overall responsibility

The overall responsibility of the Project Policy/Governance Officer is to assist the Project Manager in the coordination of policy and governance related actions of the UNEP/GEF WIOSAP project **in** accordance with the Project Document, with a view to ensuring timely and proper implementation of the Project in its entirety.

2. Duties and responsibilities

- Follow-up of the implementation of all activities specified in the Project Document and their timely completion;

- Preparation of materials for detailed annual work plans for the policy and governance related activities and the follow-up of their implementation;

- Facilitating distribution and, when required, publication of substantive reports and other materials resulting from policy and governance related activities of the project;

- Assist in drafting of work plans for implementation of the policy and governance related activities in the selected countries and service all meetings of the legal task force;

- Assist in organizing meetings of legal task force to be held in the framework of the Project and prepare detailed reports of related meetings/workshops;

- Assist in financial and administrative matters including necessary coordination within UNEP; follow up on Personnel, Fund, Finance, Travel and General Services issues and with implementing agencies, participating countries and focal points;

- Drafting of MOUs on policy and governance activities with collaborating agencies and partners and obtain technical inputs from relevant officers, checks and verifies the proposals and cost estimates received from countries;

- Assist in the preparation of Terms of reference for relevant consultants, progress reports, annual reports, half-yearly reports on status of implementation, annual budget reports and ad-hoc financial reports as and when requested;

- Prepare working documents for legal task force and working groups;

- Review all policy and governance related reports prepared and submitted to the Project Management Unit by consultants, national and regional institutions and provide feedback.

- Review all policy and governance related proposals prepared and submitted to the Project Management Unit by national and regional institutions, NGOs, CBOs and provide feedback.

- Assist in the review all technical guidelines, standards, manuals, best practices documents, management plans, etc. submitted to the Project Management Unit by national and regional institutions, experts, NGOs, CBOs and provide feedback for their improvement.

- Perform any other tasks which the Project Manager may deem necessary for the Project implementation.

3. Job requirements:

- A postgraduate university degree in environmental science, law or social sciences or its equivalent, preferably at PhD level;

- At least 15 years working experience in a national organization of which at least 5 years must have been in a regional or international project focused on coastal and marine environment;

- Must have an excellent technical documents writing skills evidenced by publications in regional and international journals;

- Conversant with the national and regional policy, legal and institutional frameworks and processes in the WIO region related to the coastal and marine environment;

- Good knowledge and familiarity with the GEF and the UNEP system.

- Fluency in English with a working knowledge of French;
- Ability to use computers in project management and experience in project proposal and project report writing.
- Must have excellent organizational and communication skills;
- Must have an ability to take initiatives, prioritise workload and work under pressure.
- Training and experience in project management would be an added advantage.

4. Type of contract:

Contract with Project Officer/Scientist will be five (5) years for the duration of the Project

5. Supervision to the post:

The work of the Project Officer/ Scientist will be supervised by the Project Manager.

Terms of Reference for the Project Administrative Assistant
G7/G8 (budget line 1104)

1. Overall responsibility

The overall responsibility of the Project Administrative Assistant is to assist the Project Manager for effective management of the UNEP/GEF Project entitled '*Implementation of the Strategic Action Programme for the protection of the Western Indian Ocean from land-based sources and activities* (WIO-SAP)" in accordance with the signed Project Document, with a view to timely and proper implementation of the Project in its entirety.

2. Duties and responsibilities:

- Coordinate information flow by processing and drafting routine correspondence and responses in English as appropriate for supervisor's signature, take dictation and transcribe, type letters, memoranda, reports, faxes, etc.;
- Assist in the organization of the supervisor's work; make travel arrangements, hotel bookings and prepare documentation required for missions;
- Assist in the financial management of the project and follow up on payments and procurement of goods and services;
- Handle inquiries pertaining to the substantive office (in English); answer routine queries and receive visitors for the Project Manager;
- Assist in setting up of meetings, liaise with relevant offices at UNEP regarding allocation of meeting rooms, process documents for the meetings, type the agenda, list of participants and working documents for the meetings as well as sending out invitations and paying of DSA to the meeting participants. Provide secretarial servicing by typing and distributing minutes/reports of the meetings as required;

- Filing: Establish an up-to-date and maintain suitable filing system for the office; maintain an up-dated computerized mailing list of supervisor's contacts, focal points, experts and Ministers of Environment for the Nairobi Convention; disseminate public information awareness by distributing public awareness material to national institutions of participating countries;

- Assist in increasing efficiency and effectiveness of the information flow by
  Coordinating and processing incoming mail, e-mails and faxes, and outgoing information faster and at less cost;

- Processing and subsequent follow-up of travel authorizations, organizing for tickets in liaison with travel unit and the travel agency, application and follow-up on visa acquisition, making accommodation arrangements, arranging for travel advance with Payments Unit, preparing documentation for meetings and Missions;

- Assist in the logistics of international meetings and conferences including assisting the participants with their travel arrangements, payment of DSA and making accommodation arrangements;

- Maintain mailing links with all participating countries and advisory centres, such as, WIOMSA, IUCN, WWF, and maintain all the MOUs signed for the project's implementation;

- Prepare pre-encumbrance for stock requisitions for the office and ensuring adequate supplies at all times.

3. Job requirements:

- An undergraduate university degree in business administration, finance or equivalent.
- Minimum of five years working experience in administrative or financial duties in an international or regional organization.
- Familiarity with the UN administrative and financial management systems.
- Fluency in written and spoken English essential and knowledge of any other UN language an advantage.
- Proficiency in the use and operation of the computer, including advanced skills in windows and its programmes.
- Ability to plan, co-ordinate and monitor own work plan and have a great sense of accuracy.
- Must have excellent interpersonal, oral and written communication and organisational skills.
- Have client orientation and satisfaction as part of the day to day duties.
- Ability to work under pressure.

4. Type of contract:

Contract with Project Administrative Assistant will be for five (5) years for the duration of the Project.

5. Supervision to the post:

The work of the Project Administrative Assistant will be supervised by the Project Manager.

APPENDIX 18: CO-FINANCING COMMITMENT LETTERS FROM PROJECT PARTNERS

(Attached Separately)

Co-financing details

	Name of project	Description	Source(s) of funding:	Duration: (year-start; year-end)	Value of investments:	Estimated value of investments during WIO-SAP project period (2015-2019):	Short description of investments planned including location(s):	Implementing agency responsible
Critical Habitats	Integrating Livelihoods and Conservation - People Partner with Nature for Sustainability	Empowerment of civil society groups - Local civil society groups empowered to engage in rights based advocacy and political processes; PFM and livelihoods - Participatory forest management contributes to improved livelihoods of poor communities, and reduce pressure on ecosystems and biodiversity; Capacity of partners - BirdLife Partners have increased capacity to strategically work with the integration of poverty reduction and nature protection.	Danida-CISU	2015 to 2017	DKK 5,000,000	DKK 1,500,000	Arabuko-Sokoke Forest, Kenya	Nature Kenya
	Elephant conservation management at Arabuko-Sokoke Forest	1. Enhanced Elephant Protection; 2. Habitat management and Connectivity; 3. Research and monitoring for management; 4. Monitor Oil and Gas exploration and mitigate impacts	NABU (Birdlife German)	Jan 2015-Dec 2015	Euro 15,000	Euro 15,000	Arabuko-Sokoke Forest, Kenya	Nature Kenya
	Support of Protected Area management of Complex Mangoky-Ihotry Complex	The Mangoky complex is located in the southwestern part of Madagascar, inside both the south and west Malagasy domain. This complex is classified as one of the huge wetland ecosystem in this region, providing multiple attributes by its ecological functions (shoreline stabilization, flood prevention, nurseries for many species of fish and shrimp	Madagascar Biodiversity Fund	2015 (renewable annually)		USD 200,000		NGO, Asity Madagascar

		and important habitat for water bird and aquatic invertebrates), by its products (crabs, fish, shrimps), and by its biological diversity, particularly the avifauna group. The purpose of the project is to conserve important biodiversity, sustain natural resource use and support ecosystem-based climate change adaptation in the new protected area in the Mangoky-Ihotry wetlands (western Madagascar coastal zone) through adaptive management involving local communities and institutional strengthening at local to national levels.						
	Emerging Knowledge for Local Adaptation Modifying the symbiosis of knowledge and governance for the adaptation of WIO coastal communities at risk from global change	This project aims at developing strategies to extend the impact of emerging knowledge relating to coastal vulnerability to enable local government and communities to use knowledge in order to facilitate adaptation and build resilience to climate change.	WIOMSA/ Government of Sweden	2014 - 2018	US$ 583 031	US$ 450 000	Implemented in South Africa; Mozambique; Mauritius and Kenya	CSIR, South Africa; National Institute for Disaster Management (INGC), Mozambique; University of Eduardo Mondlane (UEM); Mauritius Oceanographic Institute (MOI) and CORDIO East Africa
	Linking marine science, traditional knowledge and cultural perceptions of the sea in the Mozambique Channel to build	The overall goal of the project is to develop a *roadmap toward the regional governance of the Mozambique Channel and the people living within it.*	WIOMSA/ Government of Sweden	2013 - 2017	731 176	US$ 560 000	Implemented in ten study sites distributed along the Mozambique Channel coast in: Mozambique, Madagascar, Comoros, France (Mayotte, Iles Eparses) and Tanzania	Eduardo Mondlane University (Mozambique), IHSM (Madagascar), Ulanga Ngazidja (Comores), University of Dar es Salaam

	tomorrow's marine management using spatial simulation tools and educational game							(Tanzania), IRD (France) and CORDIO (Kenya)
	Developing a model for strategic adaptive management of MPAs in the Western Indian Ocean	The goal of this project is to *develop an MPA management system that is responsive to changing environmental conditions and ensures effective management of MPAs in WIO for achievement of MPA goals.*	WIOMSA/ Government of Sweden	2013 - 2017	US$ 599 950	US$ 380 000	Implemented in 4 sites in Kenya (Mombasa, Malindi, Watamu and Kisite Marine Parks and Reserves) and 1 site in Tanzania (Mafia Island Marine Park)	Kenya Wildlife Services, will involve Marine Parks Unit of Tanzania, Pwani University, East African Wildlife Society, Mafia Island Marine Park and Stanford University
	Advancing adaptive co-management of small-scale fisheries in East Africa	The goal of this project is to improve coral reef health and near shore fisheries in the WIO by improving the likelihood of long-term, effective and active participation of coastal communities in adaptive co-management.	WIOMSA/ Government of Sweden	2014 - 2018	US$ 600 000	US$ 510 000	Implemented in Kenya, Madagascar and Tanzania	WCS (Kenya); ARC Center for Excellence in Coral Reef Studies, James Cook University (Australia) and University of Dar es Salaam.
	Dugongs (*Dugong dugon*) of the Western Indian Ocean Region: – Identity, Distribution, Status, Threats and Management	The project will strive to support and improve the overall management effectiveness of existing protected areas, including across trans-boundary areas, as well as via the identification and effective integrated management of proposed new protected areas that encompass dugongs and their habitat	WIOMSA/ Government of Sweden	2014 – 2017	US$ 767 774	US$ 640 000	Implemented in Mozambique, Tanzania, Kenya, Seychelles, Comoros and Mayotte	The Association for Conservation and Protection of Dugongs and Marine Mammal Species; Centre for Dolphin Studies, Nelson Mandela Metropolitan University; UEM; Mammal Research Institute; University of Pretoria. Ministry of Livestock and

								Fisheries, Zanzibar, IMS and Sea Sense (Tanzania); KWS and KMFRI(Kenya); Seychelles Islands Foundation and Megaptera (Comoros and Mayotte)
	BY-Catch Assessment and Mitigation in Western Indian Ocean Fisheries (BYCAM)	The aims of this project are to assess bycatch and develop economically viable methods for mitigation of non-target mega-fauna species bycatch (retained or discarded) in artisanal/small-scale commercial gillnets (drift- and bottom sets), longlines, and semi-industrial prawn trawl fisheries in the WIO.	WIOMSA/ Government of Sweden	2014-2017	US$ 784 000	US$ 770 000	The project will be implemented across the WIO with case studies in Kenya, Madagascar, Mozambique, Tanzania and Zanzibar	Ministry of Livestock and Fisheries (MLF), Fisheries Research Institute (IIP), Kenya Marine & Fisheries Research Institute (KMFRI), Oceanographic Research Institute (ORI),
	Development of a regional Network for locally-managed fisheries in the WIO	This project aims at coordinating the process of designing a regional network for locally managed fisheries in the WIO region and to also build community capacity and governance frameworks	MacArthur Foundation	2014-2015	US$ 150 000	US$ 100 000		WIOMSA, WCS &CORDIO
	Training courses on Integrated Sustainable Coastal Development	This course aims at contributing to an integrated sustainable development of coastal zones in which the needs and rights of poor people are taken into account. This is achieved through supporting processes of change in key organisations working with planning and management of coastal zones.	Government of Sweden	2011-2016		US$ 300 000		WIOMSA, NIRAS University of Gothenburg

	Protecting Mangroves and Strengthening Communities in Western Madagascar			2012-2015		US$ 75 000		WWF
	Sustainable Agriculture and husbandry in the Manakaravavy Watershed					US$ 150 000		WWF
	Sustaining life – West Coast Mangrove component		Sida	2014-2016		US$ 500 000		WWF
	Sustaining life – MWIOPO Capacity Building		Sida	2014-2016		US$ 80 000		WWF
	Restauration et gestion communautaire des mangroves de la Manambolo		AFD	2015-2017		US$ 495 000		WWF
	Improving coastal livelihoods in Lamu		Multiple donors	2015-2018		US$ 1 200 000		WWF
Environmental Flow	Empowering the poor to achieve local control and sustainable management of the natural resources of Tana River Delta, Kenya	The aim of the project is to reduce the poverty of 10,000 people within the Tana Delta by enhancing their livelihoods within a framework of locally controlled, sustainable natural resource management. The six main outcomes will be: all sectors of the Delta population are aware of their rights regarding the Delta's natural resources; have enhanced	DFID	1 July 2010 to March 2015	£499,903	£40,000	Tana Delta	Nature Kenya

		capacity and an improved institutional framework in which to claim these rights, participate in advocacy programmes to counter external threats, and improve governance and attract appropriate development. Agriculture and pastoralism are sustainably managed to generate enhanced livelihood benefits; communities income is increased from new nature based IGAs, and lessons learnt in building local control and sustainable management of natural resources used to influence national policy in Kenya and build support for development in the UK. A defining change will be from poor top down governance of land use and development in the Delta to community based local control of wetland resources. We hope to assist local communities to develop an alternative development pathway based on local management of the Delta's unique natural resources rather than major infrastructure schemes which have also failed local people and their environment to date. This project will generate lessons on a new set of issues involving local control of wetlands, resolving conflict between pastoral and agricultural communities and insights for use in comparable areas elsewhere e.g. around Lake Victoria, Usangu floodplain in Tanzania and in western Uganda						

	Sustainable Development and Management: Empowering People and Nature in the Tana Delta, Kenya	Aiming at demonstrating the benefits to local communities from diversifying income streams using natural resources. This will include training 4 target groups, especially women, in skills to develop feasible income streams; facilitating adoption of sustainable natural resource techniques and technology and supporting the development and marketing of community-based tourism around key community conservation areas. We will assist the farmer, fisher and pastoralist target groups to pilot implementation of the most feasible and sustainable improvements to agriculture, fisheries and pastoralism. We will seek government and private sector engagement in developing communal infrastructure for scaling up the processing and marketing of existing agricultural products. Finally, we will publicise the objectives and lessons learnt from the project to build support for development in Kenya and seek the adoption of lessons learnt from the project in strategic planning and building local control and management of natural resources into national policy in Kenya.	Dutch Government IUCN-Ecosystem Alliance	August 2011 to June 2015	Euro 293,000	Euro 50,000	Tana Delta, Kenya	Nature Kenya
Governance and Regional Collaboration	Core support to the Conservation Action and Policy Team	Core funding to cover the time spent by Regional Director, Team Leader for Conservation Action and Policy, Coordinators of Policy and Advocacy, Marine and Finance and Admin in conservation activities in the WOI region. This covers 10days	BirdLife Core	January to December 2015, renewable		USD 569,000		Birdlife Africa

		of regional director's time, 36 days of the Team leaders' time and 60 days each of the coordinators for Marine, Policy and Advocacy and Administration.						
	Marine Programme	Support the Global Seabirds Programme in advocacy activities in Africa	Various sources, mainly RSPB	2015 - 2019		USD 100,000		Birdlife Africa
	Marine Science for Management (MASMA) Programme	This include activities such as Symposia, production of State of the Coast Reports and organization of science to policy workshop	WIOMSA/ Government of Sweden	2012-2017	US$ 12m	US$ 600 000		WIOMSA
	Coastal East Africa Initiative Sustainable Trade and Investment component		Multiple donors	2015-2019		US$ 1 000 000		WWF

APPENDIX 19: ENDORSEMENT LETTERS OF GEF NATIONAL FOCAL POINTS

(Attached separately)

Details on the Co-financing contributions by the participating countries

	Name of project	Description	Source(s) of funding:	Duration: (year start; year end)	Value of investments:	Estimated value of investments during WIO-SAP project period (2015-2019):	Short description of investments planned including location(s):	Implementing agency responsible
Comoros								
Critical Habitats	GIRE (Gestion Intégrées des ressources en eau)		UNOPS	2013-2016	US$ 500 000			
	CRCCA (Renforcement de Capacité de Résilience du Secteur Agricole au Changement Climatique)		FEM	2014-2017	US$ 10 m	US$ 9 m	-Appuis constitutionnelle	MPEEIA
	AMCC (Alliance Mondiale Sur le Changement Climatique)		UE		Euro 30m			MPEEIA+UE
	ACCA (Projet d'agriculture Adapté au Changement Climatique		PNUD/FEM	2014-2018	US$ 65m	US$ 65m		MPEEIA
	Projet d'Appuis au CODEX Alimentarius		FAO	2014-2016	US$ 318 639			MPEEIA
	Projet d'appui au développement du parc marin de Mohéli		AFD, Gouvernement des Comores	2015-2017	Euro 3m	4.2m	Gestion des ressources marines et coters	Direction de l'Environnement
	Projet Pilote régional de gestion de risques de Catastrophes		FAO-UE		US$ 250 000			MPEEIA
Kenya								

Critical Habitats	Mapping and inventorying of coastal wetlands		Government of Kenya (GOK)	2015-2016	Kshs 8m	Kshs 6m	Wetlands survey; data analysis and atlas production experts meetings/sessions; printing; atlas launching event	NEMA
	Development of ICZM Awareness Strategy		GOK&KCDP	2014-2015	Kshs 4m	Kshs 4m	Awareness strategy development	NEMA, Stakeholders
	Implementation of ICZM Awareness Strategy		GOK&KCDP	2015-2019	Kshs 15m	Kshs 5m	Education and Awareness meeting targeting different groups; materials production; TV and radio talk shows, etc.	NEMA, Stakeholders
	Development of second edition of Kenya State of the Coast Report		GOK	2015-2016	Kshs 6m	Kshs 1m	Generate second edition of Kenya State of the coast report	NEMA, Stakeholders
	Review and develop ICZM Action plan 2016-2020		GOK	2016-2017	Kshs 5m	Kshs 1.5m	Generate ICZM Action Plan 2016-2020 period	NEMA, Stakeholders
Water Quality	Implementation of Athi-Sabaki River Pollution Prevention & Control Strategy		GOK	2014-2019	Kshs 10m	Kshs 6m	Mapping of pollution hotspots in Athi-sabaki basin; inspection and enforcement work; awareness creation; rehabilitation activities; capacity building	NEMA, County Governments along Athi-Sabaki basin; stakeholders
	Implementation of National Waste Management Strategy in the coastal towns (pilot in Mombasa and Malindi towns)		GOK NRM	2014-2019	Kshs 20m	Kshs 5	Mapping of pollution hotspots; Support county governments in implementation of waste management measures; demonstrate best practices in solid waste management; capacity building; etc.)	NEMA, Coastal County governments, stakeholders
	Promotion of best practices in wastewater management in the coast		GOK & KCDP	2014-2017	Kshs 15m	Kshs 5m	Documentation of best practices in wastewater management; dissemination of best practices findings; demonstration of innovate technologies in wastewater	

							management in the coast	
Environmental Flow	Development of Malindi-Sabaki estuary area integrated management plan		GOK & KCDP	2014-2015	Kshs 3.5m	Kshs 3.5m	Development of Malindi-Sabaki estuary area integrated management plan (stakeholder mobilization; awareness creation; scoping; site surveys; plan drafting sessions; stakeholders meetings; printing & launching)	NEMA, Kilifi County Government, Stakeholders
	Implementation of Malindi-Sabaki estuary area integrated management plan		GOK & KCDP	2015-2019	Kshs 12m	Kshs 4m	Implementation of Malindi-Sabaki estuary area management plan (spatial planning; demarcation of riparian zone; rehabilitation of degraded mangroves; pollution abatement; awareness creation; community livelihood support)	NEMA, Kilifi County Government, Stakeholders
	Development of Tana Delta management plan		GOK & KCDP	2014-2015	Kshs 5m	Kshs 4m	Development of Tana Delta management plan (stakeholder mobilization & awareness; scoping & site surveys; plan drafting sessions; stakeholders	NEMA, Tana River County Government, Stakeholders
Madagascar								
Water Quality	Mise en place d'un réseau d'observatoires et de suivi de la pollution marine à Mahajanga, Toamasina, Vangaindrano et Toliara		Ressource propre (interne)	2015-2019	US$ 100 000	US$ 100 000	Les connaissances sur les polluants et substances toxiques affectant les zones côtières et marines malagasy restent encore incomplètes. Ce projet consiste à promouvoir les outils d'aide à la décision et à la gestion de la pollution marine au niveau nationale. La mise en œuvre de ce projet est assurée par le CNRE avec	

							ses partenaires	
Environmental Flow	Schémas Directeur d'Aménagement et de Gestion intégrée des Ressources en Eau (SDAGIRE) des six Grands Bassins versant de Madagascar		BAD	2013-2018	US$ 10 000 000	US$ 7 116 034	Ce projet consiste à élaborer les outils Gestion intégrée des Ressources en Eau (GIRE) au niveau des bassins versants du Sud et du Betsiboka	Ministry of Water and the private sectors with collaboration of the national institution
Mauritius								
Critical Habitats	Rehabilitation of beaches		Government of Mauritius			US$ 3.2 m		Ministry of Environment and Sustainable Development
	Beach Programme Re-profiling		Government of Mauritius			US$ 1.0 m		Ministry of Environment and Sustainable Development
	Zoning of Lagoons		Government of Mauritius			US$ 0.3 m		Ministry of Tourism and Leisure
Seychelles								
Critical Habitats	Wetland and watercourses management	Management of wetlands to ensure integrity and prevent encroachment by waste and invasive species	GOS Capital allocation	Annual	SR 3.2 million	SR 3.2 million	Removal of waste and invasives. Maintenance of river flows	Ministry of Environment and Energy
	Reef rehab projects Mahe	Trials with techniques to re instate reef habitats	Private	2014-2016	50,000Euro	50,000Euro	Rehabilitation of 2000m2 of reef through nursery, planting of coral fragments, monitoring	Four Seasons Resort

	Restoration of mangrove colony on Curieuse	Restoration of protection measures damaged by Tsunami, so as to prevent deterioration of nationally important mangrove habitats on Curieuse	GOS Capital allocation	Jan 2015-Dec 2015	SR 4 million	Not allocated, request to government pending	Rehabilitation of seawalls, replanting of mangrove where destruction has occurred, signposting and rehabilitation of boardwalk, sensitisation material	Seychelles National Parks Authority
	Reef rehab projects Cousin	Development of methodologies for nurseries and coral transplant (PA project)	GEF		to be confirmed		Part of a larger project: http://www.pcusey.sc/index.php/pcu-projects/ongoing/89-pa-project	MEE/UNDP, Nature Seychelles
	Establishment of new marine protected areas in Seychelles and marine spatial planning	Two programs to evaluate possibilities for temporal reserves and for zoning of marine areas (Marine Spatial plan). PA Project (above) and Debt for adaptation swap project supported by the Nature Conservancy http://www.seychellesmarinespatialplanning.com	GOS/GEF		to be confirmed		Technical support, Financial support for field investigations, and production of reports and management tools	MEE and partners
	Review and update of Wetlands policy	Tool for safeguarding wetlands and for guiding development	GOS Recurrent funds	Jan 2015-Dec 2015	5000USD	5000$	Production of new reviewed policy to accommodate new commitments	Ministry of Environment and Energy,
	Solid waste management	National program for collection and disposal of solid waste	GOS Recurrent funds	Annual program	SR 47 Million	Same	Collection of waste and landfill management	Landscape and Waste Management Authority
	Beach sanitation program	National program for cleaning of beaches	GOS Recurrent funds	Annual program	to be confirmed			Landscape and Waste Management Authority
Water Quality	Refurbishment of greater Victoria Sewerage network	Replacement and refurbishment of pipes and pump stations to improve efficiency and cut down on releases from the system	GOS allocation to Public Utilities Corporation plus international		unknown		Investment in hardware and installation	Public Utilities Corporation

			financing					
	East Mahe Sewerage project	Project that aims to connect the Eastern Corridor of Mahe (Cascade to Au Cap) to a sewerage network	GOS allocation to Public Utilities Corporation plus international financing		unknown		Feasibility studies, and designs produced	Public Utilities Corporation
	La Digue Sewerage project	Connection of majority of population of La Digue to sewerage network to prevent groundwater pollution	GOS allocation to Public Utilities Corporation plus international financing		unknown		Complete engineering, contract and installation of hardware	Public Utilities Corporation
	Praslin sewerage project	Provision of sewerage for the two population centers on Praslin island	GOS allocation to Public Utilities Corporation plus international financing		unknown		Feasibility studies, and designs produced	Public Utilities Corporation
	EQO water component Coastal water monitoring	Monitoring of water quality in rivers and coast to ascertain quality and compare with set targets	GOS Capital allocation		10,000 $		Regulations, guidelines and financial support for pilot exercises	Ministry of Environment and Energy and Ministry of Health
	Compliance to MARPOL and other marine pollution requirements	Program by Seychelles Maritime Administration Authority to arrive at compliance and introduce controls	GOS Recurrent funds		unknown		Regulations and guidelines	Ministry of Transport, SMSA, SPA

Environmental Flows	No comprehensive program	National programs are restricted to regular monitoring of stream flows for PUC and with JICA under drainage programs	GOS funds and JICA				Information on flows and support tools for drainage management	MEE, PUC
Regional Cooperation		Focal Point activities and Convention coordination			5000$		Regular coordination, liaison, and activities such as COP	
					$4 600 000			

APPENDIX 20: LIST OF CONSULTATIONS AND ANALYSES UNDERTAKEN USING PPG GRANT

The development of the proposal has been widely participatory and encompassing so that it reflects the commitment and interests of a wide range of stakeholders in achieving the sustainable management of the coastal and marine environments of the WIO region. The proposal has been enriched with inputs from different meetings and key documents as well as the discussions with key stakeholders.

The Focal Points of the Nairobi Convention met at least three times to discuss the proposal as it was being developed. Key meetings that discussed the proposal are highlighted below:

Initial stages

The elements of the proposal and the process to develop it were discussed in the meeting of the Nairobi Convention Focal Points held in August 2012 and during the Seventh Meeting of the Contracting Parties to the Nairobi Convention held in December 2012. Both these meetings took place in Maputo, Mozambique. During the latter meeting the Contracting Parties were urged to collaborate with the Secretariat in developing a project on capacity strengthening and technical assistance for the Protocol on Land Based Sources and Activities as well as national implementation plans in the Western Indian Ocean region.

In January 2014, the consultant tasked to develop the full proposal attended the UNDP-GEF SAPPHIRE Project Development Regional Policy Advisory Committee Meeting that took place in Johannesburg, South Africa. During the meeting, discussions were held with representatives of South Africa, Mozambique, Seychelles, Mauritius, Madagascar and Comoros.

Thereafter, the consultant visited Tanzania and Kenya, where meetings were held with government officials from relevant departments and representatives from the research and academic institutions, national and regional NGOs and private sector.

Full Proposal development stage

Different drafts of the full proposals were presented and discussed in the following meetings:

i) The Policy Makers and Experts Stakeholders Meeting on the Strategic Action Programme for the Protection of the Marine and Coastal Environment of the Western Indian Ocean from Land Based Sources and Activities (WIO-SAP), 24-25 February 2014, Mombasa, Kenya.
ii) The meeting of the Nairobi Convention Focal Points, 26 February 2014, Mombasa, Kenya.
iii) The meeting of the Nairobi Convention Focal Points, 27 August 2014, Naivasha, Kenya.
iv) The WIO-SAP Validation Meeting, 21 November 2014, Nairobi, Kenya.

APPENDIX 21: DRAFT PROCUREMENT PLAN

The Budget Holder in close collaboration with the WIOSAP Project Manager and UNEP Financial Management Officer, will procure the equipment and services as per the Annual Procurement Plan that would be prepared by the WIOSAP Project Manager using the format presented below. The procurement of goods and services shall be undertaken in accordance with the Common Guidelines for Procurement by organizations in the UN system. The project would use IAPSO common database of potential suppliers covering goods and services that would be required. This database entitled United Nations Global Marketplace (UNGM) is available at www.ungm.org, and it contains details on the potential suppliers.

The Inception phase, the Budget Holder in close collaboration with the WIOSAP Project Manager will prepare the general procurement plan for all equipment and services to be procured over the Project's implementation period. This general plan will include and aggregate individual plans submitted by all the National Project Coordinators in participating countries. The WIOSAP project procurement plans will be updated every six months and cleared by the Budget Holder for inclusion in the six-monthly statement of expenditures report, PPR and Cash Transfer Request for the next installment of funds. The Budget Holder will ensure that the procurement process is transparent and competitive, as well as in accordance with the terms of the Letters of Agreement concluded with the implementation partners.

The normal procedures followed by the UN system for the various procurement levels of individual contracts will be applied as follows:

- **Values of purchase orders up to US$ 30,000**: A direct selection of possible suppliers will be done by the procurement officer concerned. At least three (3) suppliers will be identified and based on the analysis of the quotations received, the order will be awarded to the supplier who meets the specifications and delivery terms and has the lowest price.

- **Value of Purchase orders from US$ 30,000 up to US$ 100,000**: Limited competitive bidding will be done by inviting a pre-selected short list of suppliers to respond through sealed bids. The shortlist will consist of suppliers from developing countries, including the recipient countries; under-utilized donor countries and other donor countries. The order will be awarded to the most qualified and responsive contractor submitting the lowest bid.

- **Value of Purchase orders from US$ 100,000 and above**: International competitive bidding will be the rule. If exigencies of the project allow, suppliers will be invited to bid by advertisement in the UN publication "***Development Business***", IAPSO's "***Business Opportunities*** on www.iapso.org" or other trade publications. When requests for proposals have been issued, contracts shall be awarded to the best evaluated responsive offer.

The delivery of procured goods to participating countries would be done through the UNDP Resident Representatives who also serves as the Resident Coordinators of development activities for the United Nations system as a whole.

APPENDIX 22: GEF IW TRACKING TOOL

Attached separately

APPENDIX 23: TERMS OF REFERENCE FOR CONSULTANTS AND SUB-CONTRACTS

Background: The activities requiring consultants will be contracted through letters of agreement. Sub-contracts to institutions will be executed through LOAs/PCAs and these will be for selected institutions in the region that have demonstrated the capacity to undertake specific activities of the projects. Only institutions with competent human resources and infrastructure and have a national network, will be eligible to undertake activities that are in line with the institutional mandate. International consultants will work jointly with national experts in the region. Considerable capacity exists in the region for which much of the work will be carried out in this project. However, there is still a need for internationally recruited consultants to assist with specific project activities where capacity in the region is lacking. The International Consultants will report to the Project Manager. The major consultants to be used for this project are listed below by project components and activities. Detailed Terms of Reference for each consultancy will be developed by the Project Manager in collaboration with NCS.

Table 23.1: Required International Consultants by Project Component and Activity. Detailed Terms of Reference will be prepared by the Project Manager.

Project Component and Activity	**International Consultant**	**Task**	**Days**	**Daily Rate (US$)**	**Total (US$)**
Component A Activity A.1.3.1	One (1) International Consultant	Assist countries in the development of guidelines and document best practice for the restoration of degraded coastal habitats	30	750	22,500
Component A Activity A 2.1.1	One (1) International Consultant	Assist countries in the development of methodologies and guidelines for economic valuation of critical coastal and marine ecosystems	30	750	22,500
Component A Activity A.2.2.1	One (1) International Consultant	Develop tools and guidelines for vulnerability assessment and spatial planning at regional and sub-regional level	30	750	22,500
Component A Activity A 2.4.1	One (1) International Consultant	Develop regional indicators and regional monitoring framework/protocol for critical coastal and marine ecosystems	30	750	22,500
Component A Activity A 2.4.2	One (1) International Consultant	Establishment of national modalities for monitoring the state of critical coastal and marine habitats	30	750	22,500
Sub-Total					**112,500**
Component B Activity B 2.3.1	One (1) International Consultant	Assist in building capacity for implementation of regional standards and monitoring and controlling wastewater discharges	30	750	22,500
Sub-Total					**22,500**
Component C Activity C	One (1) International	Assist countries in the preparation of regional guidelines on EFA and build	30	1000	30,000

Project Component and Activity	International Consultant	Task	Days	Daily Rate (US$)	Total (US$)
2.1.1	Consultant	capacity for EFA at national and regional levels			
Component C Activity C 2.1.2	One (1) International Consultant	Assist in the development of an institutional and regulatory framework for conjunctive river basin-coastal area management	30	1000	30,000
Activity D.3.1. Mid-Term Evaluation (MTE):	One (1) International Consultant	Undertake Mid-Term Evaluation of the project in 3rd year of implementation, according to standard GEF MTE ToR and procedures	40	1000	40,000
Activity D.3.2. Terminal Evaluation (TE):	One (1) International Consultant	Undertake Terminal Evaluation within last six months of project implementation., according to standard GEF TE ToR and procedures	60	1000	60,000
Activity D.3.3. Annual External Audits	One (1) External Auditor	Undertake annual external audit of project finances	40	750	40,000
Sub-Total					**200,000**
TOTAL FOR INTERNATIONAL CONSULTANTS					**335,000**

Table 23.2: National Consultants

Project Component and Activity	International Consultant	Task	Days	Daily Rate (US$)	Total per country (US$)	Total for all countries (US$)
Component A Activity A.1.1.1 and A1.2. 1	National Consultants (Total 2)	Assist countries in the development of marine spatial plans including management plans for priority coastal sites in target countries.	30	500	15,000	30,000
Component A Activity A.1.3.1 and A1.3.2	One (1) National Consultant (Total 8; 1 for each country)	Support the international consultant in the development of regional guidelines and document best practice for the restoration of degraded coastal habitats	30	500	15,000	135,000
Component A Activity A.1.4.1	One (1) National Consultant (Total 3)	Support upscaling and replication of ICM and associated capacity building (3 priority sites)	30	500	15,000	45,000
Component A Activity A.2.1 and A	One (1) national Consultant	Assist the international expert in the customising methodologies and guidelines for economic valuation of	30	500	15,000	135,000

Project Component and Activity	International Consultant	Task	Days	Daily Rate (US$)	Total per country (US$)	Total for all countries (US$)
2.1.1	(Total 8; 1 for each country)	critical coastal and marine ecosystems to provide data to promote awareness of the importance of coastal habitats.				
Component A Activity A.2.1 and A 2.1.1	One (1) national Consultant (Total 3)	Carry out economic valuation of critical coastal and marine ecosystems in specific sites, using regionally agreed methodologies/guidelines.	60	500	30,000	90,000
Component A Activity A.2.2 and A 2.3	One (1) national Consultant (Total 8; 1 for each country)	Conduct vulnerability assessment of specific sites and assist in developing spatial plans for target sites	60	350	21,000	168,000
Component A Activity A 2.3	One (1) national Consultant (Total 8; 1 for each country)	Carry out an assessment of the existing livelihood systems and develop extractive use strategies for resources in critical coastal and marine ecosystems in participating countries. Will involve local communities and NGOs in the process.	15	350	5,250	42,000
Component A Activity A 2.4.1 and A 2.4.2	One (1) national Consultant (Total 8; 1 for each country)	Assist in the development of key indicators for assessing effectiveness of management and advice on the national modalities for monitoring state of the critical habitats	15	350	5,250	42,000
Component A Activity A 2.3	One (1) national Consultant (Total 8; 1 for each country)	Assist in the compilation of information for updating the existing guidelines on fisheries and aquaculture	15	350	5,250	42,000
Sub-Total						**729,000**
Component B Activity B.1.1 & B 1.2	One (1) National Consultant	Review and or identify appropriate wastewater /effluent treatment technologies being used in participating countries and advice the suitable/appropriate ones.	30	500	15,000	135,000
Component B Activity B 2.1.1 and B2.1.2	One (1) national Consultant (Total 8; 1 for each country)	Review existing national standards, regulations and processes in the region and assist the international consultant in the development of regional standards and guidelines for wastewater and wastewater monitoring	30	500	15,000	135,000
Component B Activity B 2.2.1	One (1) national Consultant (Total 8; 1 for	Assist in the development and implementation of water quality monitoring framework	30	500	15,000	135,000

Project Component and Activity	International Consultant	Task	Days	Daily Rate (US$)	Total per country (US$)	Total for all countries (US$)
	each country)					
Sub-Total						**405,000**
Component C Activity C 1.1.1 and C.2.1.1	National Consultant (Total 2)	Carry out national capacity needs assessment for EFA and provide recommendations for addressing them. Also, assist in the development of guidelines and methodologies for environmental flow assessment (EFA) in the WIO region. Assist in disseminating EFA guidelines in relevant institutions	30	500	15,000	30,000
Component C Activity C 2.1.2	National Consultant (Total 2)	Assist in the development of an institutional and regulatory framework for conjunctive river basin-coastal area management	30	500	15,000	30,000
Sub-Total						**60,000**
Component D Activity D 1.1 & D1.2.2	One (1) national Consultant (Total 8; 1 for each country)	Advice on the national level review of the ICZM Protocol and implementation arrangements and mechanisms for integration into national legislation and processes.	30	500	15,000	135,000
Component D Activity D 1.1 & D1.2.2	One (1) national Consultant (Total 8; 1 for each country)	Review capacity needs for the implementation of the LBSA Protocol in the country. Provide recommendations on the national level processes and or mechanisms for the implementation of LBSA Protocol	30	500	15,000	135,000
Component D Activity D1.2.1	One (1) national Consultant (Total 8; 1 for each country)	Develop policy briefs on specific LBSA issues, including model LBSA legislation and advice on its integration into legislative drafting/formulation processes. Also train LBSA Practitioners/Policy makers on the LBSA Protocol.	30	500	15,000	135,000
Sub-Total						**405,000**
TOTAL FOR NATIONAL CONSULTANTS						**1,596,000**

Table 23.3: Sub-Contracts by components and activities. Detailed Terms of Reference will be prepared by the Project Manager.

Project Component and Activity	Institution	Task	Days	Daily Rate (US$)	Total per country (US$)	Total for all countries (US$)
Component A Activity A.1.1& A1.2.	National institutions	Develop marine spatial plans for priority coastal sites and ensure their adoption by stakeholders.	60	1000	60,000	480,000
Component A Activity A.1.2 & A1.3	National institutions	Develop management plans for shared critical marine and coastal ecosystems in selected hotspot areas and ensure their adoption by stakeholders	60	1000	60,000	480,000
Component A Activity A.1.3.1 &A 1.3.2	NGOs	Carry out restoration of degraded critical coastal and marine ecosystems in key hotspot sites	50	1000	50,000	400,000
Component A Activity A.1.3.1 & A 1.3.2	National Institutions	Carry out an assessment of the vulnerability of the critical coastal and marine ecosystems in key hotspot sites to climate change and variability	30	US$ 1000	30,000	240,000
Component A Activity A.1.4.1 & A 1.4.2	National Institutions	Implement pilot in-country interventions on ICZM in selected areas and compile lessons, success stories. Work with all stakeholders in the target areas to implement ICZM plans.	60	1000	60,000	480,000
Component A Activity A 2.3	NGOs	Carry out an assessment of the existing livelihood systems and develop extractive use strategies for resources in critical coastal and marine ecosystems in selected sites. Work jointly with local communities in this activity.	30	1000	30,000	240,000
Component A Activity A 2.4.1	National Institutions	Carry out monitoring of coastal and marine ecosystems in selected hotspot areas using regionally agreed indicators and monitoring methodologies for coastal ecosystems and prepare the state of the coast report based on results of monitoring programmes.	365	1000	365,000	2,920,000
Sub-Total						5,240,000
Component B Activity B 1.2	National Institutions	Implement pilot in-country interventions on wastewater/effluent treatment in selected hotspot sits using appropriate technologies and in collaboration with local stakeholders.	60	1000	60,000	480,000
Component B Activity B 1.3	NGOs	Develop and implement programmes and actions for empowering local communities on issues related to wastewater management/water, sanitation and hygiene (WASH).	20	1000	20,000	160,000
Component B Activity B 2.1.1	National institutions	Implement a pollutants loads monitoring programme in selected hotspot sites using regionally agreed monitoring guidelines/protocol. Disseminate results of the monitoring programme	365	1000	365,000	2,920,000
Component B Activity B 2.1.2	National institutions	Develop national wastewater/effluent control standards including the formulation of implementation framework	60	1000	60,000	480,000
Component B Activity B	National institutions	Develop and implement cost-effective wastewater monitoring	60	1000	60,000	480,000

Project Component and Activity	Institution	Task	Days	Daily Rate (US$)	Total per country (US$)	Total for all countries (US$)
2.2		framework/programme in selected sites and create awareness on the same				
Component B Activity B 2.2	Regional NGO	Implement a training programme on the implementation of regional water quality standards including the monitoring and control of wastewater/effluent discharges.	30	1000	30,000	240,000
Sub-Total						4,120,000
Component C Activity C.1.1	National Institutions	Carry out environmental flow assessment (EFA) in selected river basins using regionally agreed methodologies and guidelines. Also, provide recommendations on the implementation of EFA in target river basins	50	1000	50,000	400,000
Component D Activity D.2.1.1& D.2.1.2	National Institutions	Strengthen the national clearing house mechanism/data centres by incorporating information on climate change and variability	30	1000	30,000	240,000
Sub-Total						620,000
TOTAL						9,980,000

APPENDIX 24: MAIN STAKEHOLDERS OF THE WIOSAP PROJECT

Overall Project Output/Activity	Expected Results	Main Stakeholders
OUTPUT A.1.1: National institutions undertake participatory spatial planning to increase the resilience of selected key coastal ecosystems to anthropogenic impacts including the impacts of climate change and variability.		
Activity: A1.1.1 Development of marine spatial plans for five priority sites and associated capacity building	Marine spatial plans for selected priority critical coastal and marine habitats developed. Demonstration of the value of coastal spatial planning to policy makers and coastal communities.	Department of Environmental Affairs and Tourism (the DEAT) – South Africa Ministry of Environment and Forests (Direction Nationale de l'Environnement, Ministère de l'Environnement, des Forêts et des Stratégies Agricoles) - Comoros Institut National de Recherché pour l'Agriculture, la Pêche et l'Environnement (INRAPE) - Comoros Ministry of Environment & National Development Unit (MOE) - Mauritius Ministry of Coordination of Environmental Affairs (MICOA) - Mozambique National Environment Management Authority (NEMA) - Kenya National Environment Management Council (NEMC) - Tanzania Tanzania Forest Services (TFS) - Tanzania The Marine Parks and Reserves Authority (MPRA) - Tanzania Kenya Wildlife Service (KWS) - Kenya Kenya Forest Service (KFS) -Kenya Ministry of Environment, Water and Natural Resources -Kenya Ministry of Environment, Natural Resources and Transport -Seychelles Kenya Marine and Fisheries Research Institute (KMFRI) - Kenya Tanzania Fisheries Research Institute (TAFIRI) -Tanzania National Parks and Conservation Service (NPCS) -Tanzania Seychelles National Parks Authority -Seychelles Centre National de Recherches sur l'Environnement (CNRE) - Madagascar Institute of Marine Science, University of Dar es Salaam (IMS) - Tanzania International Union for the Conservation of Nature (IUCN) World Wide Fund for Nature (WWF) Western Indian Ocean Marine Science Association (WIOMSA) Private sector
OUTPUT A.1.2: Management plans developed and adopted for at least five (5) key critical coastal and marine habitats, reinforcing the regional MPA network and mitigating habitat loss and climate change impacts.		

Activity: A.1.2.1. Development and implementation of management plans in three (3) priority sites of representative critical coastal and marine habitats and priority coastal zones	Management plans for transboundary critical coastal and marine habitats and priority coastal zones developed.	Department of Environmental Affairs and Tourism (the DEAT) – South Africa Ministry of Environment and Forests (Direction Nationale de l'Environnement, Ministère de l'Environnement, des Forêts et des Stratégies Agricoles) - Comoros Institut National de Recherché pour l'Agriculture, la Pêche et l'Environnement (INRAPE) - Comoros Ministry of Environment & National Development Unit (MOE) - Mauritius Ministry of Coordination of Environmental Affairs (MICOA) - Mozambique National Environment Management Authority (NEMA) - Kenya National Environment Management Council (NEMC) - Tanzania Tanzania Forest Services (TFS) - Tanzania The Marine Parks and Reserves Authority (MPRA) - Tanzania Kenya Wildlife Service (KWS) - Kenya Kenya Forest Service (KFS) -Kenya Ministry of Environment, Water and Natural Resources -Kenya Ministry of Environment, Natural Resources and Transport -Seychelles Kenya Marine and Fisheries Research Institute (KMFRI) - Kenya Tanzania Fisheries Research Institute (TAFIRI) -Tanzania National Parks and Conservation Service (NPCS) -Tanzania Seychelles National Parks Authority -Seychelles Centre National de Recherches sur l'Environnement (CNRE) - Madagascar Institute of Marine Science, University of Dar es Salaam (IMS) - Tanzania International Union for the Conservation of Nature (IUCN) World Wide Fund for Nature (WWF) Western Indian Ocean Marine Science Association (WIOMSA) National Directorate of Territorial Planning – Mozambique Centre for Sustainable Development of Coastal Zones - Mozambique University of Dar es Salaam - Tanzania University of Nairobi -Kenya University of Mauritius-Mauritius University of Seychelles -Seychelles Kwa Zulu Natal University –South Africa Eduardo Mondlane University –Mozambique Private sector
Output A.1.3 Three key degraded critical coastal habitats restored and resilience increased		

Activity: A.1.3.1. Identification and implementation of restoration programmes in at least one (1) priority degraded critical coastal and marine habitat.	In-country interventions on the restoration of coastal ecosystems implemented.	Department of Environmental Affairs and Tourism (the DEAT) – South Africa Ministry of Environment and Forests (Direction Nationale de l'Environnement, Ministère de l'Environnement, des Forêts et des Stratégies Agricoles) - Comoros Institut National de Recherché pour l'Agriculture, la Pêche et l'Environnement (INRAPE) - Comoros Ministry of Environment & National Development Unit (MOE) - Mauritius Ministry of Coordination of Environmental Affairs (MICOA) - Mozambique National Environment Management Authority (NEMA) - Kenya National Environment Management Council (NEMC) - Tanzania Tanzania Forest Services (TFS) - Tanzania The Marine Parks and Reserves Authority (MPRA) - Tanzania Kenya Wildlife Service (KWS) - Kenya Kenya Forest Service (KFS) -Kenya Ministry of Environment, Water and Natural Resources -Kenya Ministry of Environment, Natural Resources and Transport -Seychelles Kenya Marine and Fisheries Research Institute (KMFRI) - Kenya Tanzania Fisheries Research Institute (TAFIRI) -Tanzania National Parks and Conservation Service (NPCS) -Tanzania Seychelles National Parks Authority -Seychelles Centre National de Recherchessurl'Environnement (CNRE) - Madagascar Institute of Marine Science, University of Dar es Salaam (IMS) - Tanzania International Union for the Conservation of Nature (IUCN) World Wide Fund for Nature (WWF) Western Indian Ocean Marine Science Association (WIOMSA) Private sector

Activity: A.1.3.2. Development of guidelines, documentation of best practices and capacity building for restoration of degraded critical habitats.	Production of Guidelines and manuals for restoration of degraded critical habitats. Trained communities on the restoration of degraded critical habitats undertaken	Department of Environmental Affairs and Tourism (the DEAT) – South Africa Ministry of Environment and Forests (Direction Nationale de l'Environnement, Ministère de l'Environnement, des Forêts et des Stratégies Agricoles) - Comoros Institut National de Recherché pour l'Agriculture, la Pêche et l'Environnement (INRAPE) - Comoros Ministry of Environment & National Development Unit (MOE) - Mauritius Ministry of Coordination of Environmental Affairs (MICOA) - Mozambique National Environment Management Authority (NEMA) - Kenya National Environment Management Council (NEMC) - Tanzania Tanzania Forest Services (TFS) - Tanzania The Marine Parks and Reserves Authority (MPRA) - Tanzania Kenya Wildlife Service (KWS) - Kenya Kenya Forest Service (KFS) -Kenya Ministry of Environment, Water and Natural Resources -Kenya Ministry of Environment, Natural Resources and Transport -Seychelles Kenya Marine and Fisheries Research Institute (KMFRI) - Kenya Tanzania Fisheries Research Institute (TAFIRI) -Tanzania National Parks and Conservation Service (NPCS) -Tanzania Seychelles National Parks Authority -Seychelles Centre National de Recherches sur l'Environnement (CNRE) - Madagascar Institute of Marine Science, University of Dar es Salaam (IMS) - Tanzania International Union for the Conservation of Nature (IUCN) World Wide Fund for Nature (WWF) Western Indian Ocean Marine Science Association (WIOMSA) National Directorate of Territorial Planning – Mozambique Centre for Sustainable Development of Coastal Zones - Mozambique Centre for Sustainable Development of Urban Zones -Mozambique University of Dar es Salaam - Tanzania University of Nairobi -Kenya University of Mauritius-Mauritius University of Seychelles -Seychelles Kwa Zulu Natal University –South Africa Eduardo Mondlane University -Mozambique International Union for the Conservation of Nature (IUCN) World Wide Fund for Nature (WWF) Western Indian Ocean Marine Science Association (WIOMSA)
Output A.1.4 Pilot actions build capacity in ICM, demonstrating how ICM can be strengthened at the local level through the empowerment of communities and other actors at demonstration sites (under A.1.2 and A.1.3).		

Activities: A.1.4.1. Support up-scaling and replication of ICM and associated capacity building in at least three (3) priority sites.	Guidelines/technical manuals replication of ICM successes at national level produced. Participation of Government officials and community members in consultative workshops /meetings on ICM.	Department of Environmental Affairs and Tourism (the DEAT) – South Africa Ministry of Environment and Forests (Direction Nationale de l'Environnement, Ministère de l'Environnement, des Forêts et des Stratégies Agricoles) - Comoros Institut National de Recherché pour l'Agriculture, la Pêche et l'Environnement (INRAPE) - Comoros Ministry of Environment & National Development Unit (MOE) - Mauritius Ministry of Coordination of Environmental Affairs (MICOA) - Mozambique National Environment Management Authority (NEMA) - Kenya National Environment Management Council (NEMC) - Tanzania Tanzania Forest Services (TFS) - Tanzania The Marine Parks and Reserves Authority (MPRA) - Tanzania Kenya Wildlife Service (KWS) - Kenya Kenya Forest Service (KFS) -Kenya Ministry of Environment, Water and Natural Resources -Kenya Ministry of Environment, Natural Resources and Transport -Seychelles Kenya Marine and Fisheries Research Institute (KMFRI) - Kenya Tanzania Fisheries Research Institute (TAFIRI) -Tanzania National Parks and Conservation Service (NPCS) -Tanzania Seychelles National Parks Authority -Seychelles Centre National de Recherches sur l'Environnement (CNRE) - Madagascar Institute of Marine Science, University of Dar es Salaam (IMS) - Tanzania International Union for the Conservation of Nature (IUCN) World Wide Fund for Nature (WWF) Western Indian Ocean Marine Science Association (WIOMSA) National Directorate of Territorial Planning – Mozambique Centre for Sustainable Development of Coastal Zones - Mozambique University of Dar es Salaam - Tanzania University of Nairobi -Kenya University of Mauritius-Mauritius University of Seychelles -Seychelles Kwa Zulu Natal University –South Africa Eduardo Mondlane University -Mozambique Private sector
Output A.2.1 Economic valuation of at least three (3) key critical coastal and marine habitats including integration of economic valuation to coastal management and planning.		

Activity: A.2.1.1 Application of economic evaluation methodologies in least two (2) priority critical habitat sites with particular reference to vulnerable areas (including but not limited to the northern Mozambique Channel).	New methodologies for undertaking economic evaluations of critical habitats.	Department of Environmental Affairs and Tourism (the DEAT) – South Africa Ministry of Environment and Forests (Direction Nationale de l'Environnement, Ministère de l'Environnement, des Forêts et des Stratégies Agricoles) - Comoros Institut National de Recherché pour l'Agriculture, la Pêche et l'Environnement (INRAPE) - Comoros Ministry of Environment & National Development Unit (MOE) - Mauritius Ministry of Coordination of Environmental Affairs (MICOA) - Mozambique National Environment Management Authority (NEMA) - Kenya National Environment Management Council (NEMC) - Tanzania Tanzania Forest Services (TFS) - Tanzania The Marine Parks and Reserves Authority (MPRA) - Tanzania Kenya Wildlife Service (KWS) - Kenya Kenya Forest Service (KFS) -Kenya Ministry of Environment, Water and Natural Resources -Kenya Ministry of Environment, Natural Resources and Transport -Seychelles Kenya Marine and Fisheries Research Institute (KMFRI) - Kenya Tanzania Fisheries Research Institute (TAFIRI) -Tanzania National Parks and Conservation Service (NPCS) -Tanzania Seychelles National Parks Authority -Seychelles Centre National de Recherches sur l'Environnement (CNRE) - Madagascar Institute of Marine Science, University of Dar es Salaam (IMS) - Tanzania International Union for the Conservation of Nature (IUCN) World Wide Fund for Nature (WWF) Western Indian Ocean Marine Science Association (WIOMSA) National Directorate of Territorial Planning – Mozambique Centre for Sustainable Development of Coastal Zones - Mozambique University of Dar es Salaam - Tanzania University of Nairobi -Kenya University of Mauritius-Mauritius University of Seychelles -Seychelles Kwa Zulu Natal University –South Africa Eduardo Mondlane University -Mozambique
Output A.2.2 Tools and guidelines for vulnerability assessment and spatial planning supports monitoring and management actions.		

Activity: A.2.2. Development of tools and guidelines for vulnerability assessment to climate change and for spatial planning at the regional or sub-regional scale (e.g. northern Mozambique Channel) (and where necessary develop new guidelines) and support their application.	Regional guidelines and methodologies for ecosystems vulnerability assessment and spatial planning developed and applied. Ecosystems vulnerability assessment studies undertaken using regional guidelines.	Department of Environmental Affairs and Tourism (the DEAT) – South Africa Ministry of Environment and Forests (Direction Nationale de l'Environnement, Ministère de l'Environnement, des Forêts et des Stratégies Agricoles) - Comoros Institut National de Recherché pour l'Agriculture, la Pêche et l'Environnement (INRAPE) - Comoros Ministry of Environment & National Development Unit (MOE) - Mauritius Ministry of Coordination of Environmental Affairs (MICOA) - Mozambique National Environment Management Authority (NEMA) - Kenya National Environment Management Council (NEMC) - Tanzania Tanzania Forest Services (TFS) - Tanzania The Marine Parks and Reserves Authority (MPRA) - Tanzania Kenya Wildlife Service (KWS) - Kenya Kenya Forest Service (KFS) -Kenya Ministry of Environment, Water and Natural Resources -Kenya Ministry of Environment, Natural Resources and Transport -Seychelles Kenya Marine and Fisheries Research Institute (KMFRI) - Kenya Tanzania Fisheries Research Institute (TAFIRI) -Tanzania National Parks and Conservation Service (NPCS) -Tanzania Seychelles National Parks Authority -Seychelles Centre National de Recherches sur l'Environnement (CNRE) - Madagascar Institute of Marine Science, University of Dar es Salaam (IMS) - Tanzania International Union for the Conservation of Nature (IUCN) World Wide Fund for Nature (WWF) Western Indian Ocean Marine Science Association (WIOMSA) National Directorate of Territorial Planning – Mozambique Centre for Sustainable Development of Coastal Zones - Mozambique University of Dar es Salaam - Tanzania University of Nairobi -Kenya University of Mauritius-Mauritius University of Seychelles -Seychelles Kwa Zulu Natal University –South Africa Eduardo Mondlane University -Mozambique
Output A.2.3 Sustainable extractive use strategies developed and adopted for specific coastal and marine natural resources.		

Activity: A.2.3.1 Development of alternative livelihood strategies for resources in critical areas and working with communities dependent on resources to implement the strategies.	Extractive use strategies for extraction of coastal and marine natural resources developed and applied.	Department of Environmental Affairs and Tourism (the DEAT) – South Africa Ministry of Environment and Forests (Direction Nationale de l'Environnement, Ministère de l'Environnement, des Forêts et des Stratégies Agricoles) - Comoros Institut National de Recherché pour l'Agriculture, la Pêche et l'Environnement (INRAPE) - Comoros Ministry of Environment & National Development Unit (MOE) - Mauritius Ministry of Coordination of Environmental Affairs (MICOA) - Mozambique National Environment Management Authority (NEMA) - Kenya National Environment Management Council (NEMC) - Tanzania Tanzania Forest Services (TFS) - Tanzania The Marine Parks and Reserves Authority (MPRA) - Tanzania Kenya Wildlife Service (KWS) - Kenya Kenya Forest Service (KFS) -Kenya Ministry of Environment, Water and Natural Resources -Kenya Ministry of Environment, Natural Resources and Transport -Seychelles Kenya Marine and Fisheries Research Institute (KMFRI) - Kenya Tanzania Fisheries Research Institute (TAFIRI) -Tanzania National Parks and Conservation Service (NPCS) -Tanzania Seychelles National Parks Authority -Seychelles Centre National de Recherches sur l'Environnement (CNRE) - Madagascar Institute of Marine Science, University of Dar es Salaam (IMS) - Tanzania International Union for the Conservation of Nature (IUCN) World Wide Fund for Nature (WWF) Western Indian Ocean Marine Science Association (WIOMSA) National Directorate of Territorial Planning – Mozambique Centre for Sustainable Development of Coastal Zones - Mozambique University of Dar es Salaam - Tanzania University of Nairobi -Kenya University of Mauritius-Mauritius University of Seychelles -Seychelles Kwa Zulu Natal University –South Africa Eduardo Mondlane University -Mozambique Private sector
Output A.2.4 Adoption of regional indicators and baseline assessment in support of critical habitat monitoring and management.		

Activity: A.2.4.1. Development of key indicators for assessing management effectiveness and monitoring of the state of critical habitats at regional and national levels and link to the State of the Coasts reporting process.	Regionally agreed indicators and protocol for monitoring the state of coastal and marine ecosystems reviewed and adopted.	Department of Environmental Affairs and Tourism (the DEAT) – South Africa Ministry of Environment and Forests (Direction Nationale de l'Environnement, Ministère de l'Environnement, des Forêts et des Stratégies Agricoles) - Comoros Institut National de Recherché pour l'Agriculture, la Pêche et l'Environnement (INRAPE) - Comoros Ministry of Environment & National Development Unit (MOE) - Mauritius Ministry of Coordination of Environmental Affairs (MICOA) - Mozambique National Environment Management Authority (NEMA) - Kenya National Environment Management Council (NEMC) - Tanzania Tanzania Forest Services (TFS) - Tanzania The Marine Parks and Reserves Authority (MPRA) - Tanzania Kenya Wildlife Service (KWS) - Kenya Kenya Forest Service (KFS) -Kenya Ministry of Environment, Water and Natural Resources -Kenya Ministry of Environment, Natural Resources and Transport -Seychelles Kenya Marine and Fisheries Research Institute (KMFRI) - Kenya Tanzania Fisheries Research Institute (TAFIRI) -Tanzania National Parks and Conservation Service (NPCS) -Tanzania Seychelles National Parks Authority -Seychelles Centre National de Recherches sur l'Environnement (CNRE) - Madagascar Institute of Marine Science, University of Dar es Salaam (IMS) - Tanzania International Union for the Conservation of Nature (IUCN) World Wide Fund for Nature (WWF) Western Indian Ocean Marine Science Association (WIOMSA) National Directorate of Territorial Planning – Mozambique Centre for Sustainable Development of Coastal Zones - Mozambique University of Dar es Salaam - Tanzania University of Nairobi -Kenya University of Mauritius-Mauritius University of Seychelles -Seychelles Kwa Zulu Natal University –South Africa Eduardo Mondlane University -Mozambique

Activity: A.2.4.2. Establish national modalities for monitoring the state of critical marine and coastal habitats.	The modalities for the monitoring of the coastal and marine ecosystems established in countries	Department of Environmental Affairs and Tourism (the DEAT) – South Africa Ministry of Environment and Forests (Direction Nationale de l'Environnement, Ministère de l'Environnement, des Forêts et des Stratégies Agricoles) - Comoros Institut National de Recherché pour l'Agriculture, la Pêche et l'Environnement (INRAPE) - Comoros Ministry of Environment & National Development Unit (MOE) - Mauritius Ministry of Coordination of Environmental Affairs (MICOA) - Mozambique National Environment Management Authority (NEMA) - Kenya National Environment Management Council (NEMC) - Tanzania Tanzania Forest Services (TFS) - Tanzania The Marine Parks and Reserves Authority (MPRA) - Tanzania Kenya Wildlife Service (KWS) - Kenya Kenya Forest Service (KFS) -Kenya Ministry of Environment, Water and Natural Resources -Kenya Ministry of Environment, Natural Resources and Transport -Seychelles Kenya Marine and Fisheries Research Institute (KMFRI) - Kenya Tanzania Fisheries Research Institute (TAFIRI) -Tanzania National Parks and Conservation Service (NPCS) -Tanzania Seychelles National Parks Authority -Seychelles Centre National de Recherches sur l'Environnement (CNRE) - Madagascar Institute of Marine Science, University of Dar es Salaam (IMS) - Tanzania International Union for the Conservation of Nature (IUCN) World Wide Fund for Nature (WWF) Western Indian Ocean Marine Science Association (WIOMSA) National Directorate of Territorial Planning – Mozambique Centre for Sustainable Development of Coastal Zones - Mozambique University of Dar es Salaam - Tanzania University of Nairobi -Kenya University of Mauritius-Mauritius University of Seychelles -Seychelles Kwa Zulu Natal University –South Africa Eduardo Mondlane University –Mozambique
Output B.1.1 Cost-effective technologies for municipal wastewater treatment demonstrated in at least 3 sites		

Activity: B.1.1.1 Identification and implementation of wastewater management in-country interventions in at least three (3) priority sites in association with local stakeholders.	Pilot in-country interventions on wastewater treatment implemented in target countries.	Central Water Authority (CWA) – Mauritius Wastewater Management Authority (WMA) - Mauritius Seychelles Bureau of Standards (SBS) - Seychelles Centre National De Recherches Scientifiques (CNDRS) - Madagascar Laboratoire de Contrôle Qualité Raison des Epices de Comores Centre National de Recherches sur l'Environnement (CNRE) - Madagascar Department of Water Affairs and Forestry (DWAF) – South Africa Department of Environmental Affairs and Tourism (the DEAT) – South Africa Coast Water Services Board (CWSB) – Kenya Department of the Environment (DOE)- Zanzibar-Tanzania National Environment Management Council (NEMC) - Tanzania National Environment Management Authority (NEMA) – Kenya Private sector
Output B.1.2 Effluents at a minimum of 3 demonstration sites are collected, treated, recycled and/or disposed of in accordance with international best practices.		
Activity: B.1.2.1. Selection and implementation of effluent reduction measures at selected sites in accordance with the international best practices and monitoring of compliance, effectiveness and sustainability.	Effluent reduction measures that are cost-effective, efficient and sustainable are selected and implemented. Generation of effluents is controlled through implementation of effluent reduction measures.	Central Water Authority (CWA) - Mauritius Wastewater Management Authority (WMA) - Mauritius Seychelles Bureau of Standards (SBS) - Seychelles Centre National De Recherches Scientifiques (CNDRS) - Madagascar Laboratoire de Contrôle Qualité Raison des Epices de Comores Centre National de Recherches sur l'Environnement (CNRE) - Madagascar Department of Water Affairs and Forestry (DWAF) – South Africa Department of Environmental Affairs and Tourism (the DEAT) – South Africa Coast Water Services Board (CWSB) – Kenya Department of the Environment (DOE)- Zanzibar-Tanzania National Environment Management Council (NEMC) - Tanzania National Environment Management Authority (NEMA) – Kenya Private sector
Output B.1.3 Pilot actions undertaken to build capacity for water quality management and ICM promoted through empowerment of communities and other actors at the demonstration sites.		

Activity: B.1.3.1. Initiate programmes and actions that empower communities on water quality management in at least four (4) countries.	Communities trained on wastewater management issues and are involved in advocancy and monitoring of the effectivess of wastewater management interventions.	Central Water Authority (CWA) - Mauritius Wastewater Management Authority (WMA) - Mauritius Seychelles Bureau of Standards (SBS) - Seychelles Centre National De Recherches Scientifiques (CNDRS) - Madagascar Laboratoire de Contrôle Qualité Raison des Epices de Comores Centre National de Recherches sur l'Environnement (CNRE) - Madagascar Department of Water Affairs and Forestry (DWAF) – South Africa Department of Environmental Affairs and Tourism (the DEAT) – South Africa Coast Water Services Board (CWSB) – Kenya Department of the Environment (DOE)- Zanzibar-Tanzania National Environment Management Council (NEMC) - Tanzania National Environment Management Authority (NEMA) – Kenya Ministry for Coordination of Environmental Affairs (MICOA) – Mozambique Private sector
Output B.2.1 Regionally harmonized framework for monitoring pollution loads and water quality standards developed for receiving coastal waters.		
Activities: B.2.1.1. Review existing standards, regulations and processes at national levels and develop regional standards and guidelines for effective wastewater and effluent monitoring and control in accordance with best practices (Linked to B 2.3.1).	Water quality standards, regulations and processes at national level reviewed and improved. Regional standards and guidelines for effective wastewater and effluent monitoring developed and applied.	Central Water Authority (CWA) - Mauritius Wastewater Management Authority (WMA) - Mauritius Seychelles Bureau of Standards (SBS) - Seychelles Centre National De Recherches Scientifiques (CNDRS) - Madagascar Laboratoire de Contrôle Qualité Raison des Epices de Comores Centre National de Recherches sur l'Environnement (CNRE) - Madagascar Department of Water Affairs and Forestry (DWAF) – South Africa Department of Environmental Affairs and Tourism (the DEAT) – South Africa Department of the Environment (DOE)- Zanzibar-Tanzania National Environment Management Council (NEMC) - Tanzania National Environment Management Authority (NEMA) - Kenya Kenya Bureau of Standards (KBS) - Kenya Coast Water Services Board (CWSB) – Kenya Ministry for Coordination of Environmental Affairs (MICOA) – Mozambique
Output B.2.2 Regionally harmonized standards and monitoring framework for pollutant loads and effluent and marine water quality standards adopted by at least five (5) countries through participatory national and regional consultations.		

Activities: B.2.2.1 Development and implementation of cost effective water quality monitoring framework in at least three (3) countries.	A cost-effective regional water quality monitoring programme based on harmonised monitoring methodologies, indicators and standards, developed and implemented.	Central Water Authority (CWA) - Mauritius Wastewater Management Authority (WMA) - Mauritius Seychelles Bureau of Standards (SBS) - Seychelles Centre National De Recherches Scientifiques (CNDRS) - Madagascar Laboratoire de Contrôle Qualité Raison des Epices de Comores Centre National de Recherches sur l'Environnement (CNRE) - Madagascar Department of Water Affairs and Forestry (DWAF) – South Africa Department of Environmental Affairs and Tourism (the DEAT) – South Africa Department of the Environment (DOE)- Zanzibar-Tanzania National Environment Management Council (NEMC) - Tanzania National Environment Management Authority (NEMA) - Kenya Kenya Bureau of Standards (KBS) - Kenya Coast Water Services Board (CWSB) – Kenya Kenya Marine and Fisheries Research Institute (KMFRI) – Kenya Institute of Marine Sciences (IMS)-Zanzibar, Tanzania Ministry for Coordination of Environmental Affairs (MICOA) – Mozambique Private sector
Output B.2.3 Regulatory and human capacity of national and regional facilities/institutions strengthened to promote implementation of water quality monitoring using regional standards.		
Activity: B.2.3.1 Build capacity of countries to implement regional standards and ensure effective processes of monitoring and controlling wastewater and effluent discharges.	Training programmes on the effective process for monitoring and controlling wastewater/effluent discharges, developed and implemented.	Central Water Authority (CWA) - Mauritius Wastewater Management Authority (WMA) - Mauritius Seychelles Bureau of Standards (SBS) - Seychelles Centre National De Recherches Scientifiques (CNDRS) - Madagascar Laboratoire de Contrôle Qualité Raison des Epices de Comores Centre National de Recherches sur l'Environnement (CNRE) - Madagascar Department of Water Affairs and Forestry (DWAF) – South Africa Department of Environmental Affairs and Tourism (the DEAT) – South Africa Department of the Environment (DOE)- Zanzibar-Tanzania National Environment Management Council (NEMC) - Tanzania National Environment Management Authority (NEMA) - Kenya Kenya Bureau of Standards (KBS) - Kenya Coast Water Services Board (CWSB) – Kenya Kenya Marine and Fisheries Research Institute (KMFRI) – Kenya Institute of Marine Sciences (IMS)-Zanzibar, Tanzania Ministry for Coordination of Environmental Affairs (MICOA) – Mozambique
Output C.1.1 Environmental flow assessments conducted in at least three (3) pilot river basins to determine the environmental, economic and social trade-offs in water allocation and the need for management of river flows with respect to coastal areas.		

Activity: C.1.1.1 Using participatory approaches identify and support the conducting of comprehensive Environmental flow assessments (EFAs) in two selected basins.	National experts conduct EFA studies in selected in river basins using standard regional EFA guidelines and or methodologies.	Department of Environmental Affairs and Tourism (the DEAT) Department of Water Affairs and Forestry (the DWAF) Tana and Athi Rivers Development Authority (TARDA) in Kenya Water Resources Management Authority (WARMA) - Kenya Rufiji Basin Development Authority (RUBADA) in Tanzania International Union for the Conservation of Nature (IUCN) World Wide Fund for Nature (WWF) Inkomati Catchment Management Agency (ICMA) - Mozambique Komati Basin Water Authority (KOBWA) – South Africa Breede/Overberg Catchment Management Agency (BOCMA) - South Africa. Tripartite Technical Committee (TPTC) – Mozambique/South Africa Ministry for Coordination of Environmental Affairs (MICOA) – Mozambique National Environment Management Council (NEMC) - Tanzania National Environment Management Authority (NEMA) - Kenya Centre for Scientific and Industrial Research (CSIRO) – South Africa Ministry of Environment, Water and Natural Resources -Kenya
Output C.1.2 Implementation of flow assessment recommendations and participatory river basin management approaches yield environmental, economic and/or social benefits as a result of improved river flows to the coast.		
Activity: C.1.2.1 Development and implementation of environmental flow management plans for at least two (2) sub-basins, taking into account the social, environmental and economic trade-offs and the political decisions and change management mechanisms required.	Environmental flow management plans developed and implemented in selected river basins.	Department of Environmental Affairs and Tourism (the DEAT) Department of Water Affairs and Forestry (the DWAF) Tana and Athi Rivers Development Authority (TARDA) in Kenya Water Resources Management Authority (WARMA) - Kenya Rufiji Basin Development Authority (RUBADA) in Tanzania International Union for the Conservation of Nature (IUCN) World Wide Fund for Nature (WWF) Inkomati Catchment Management Agency (ICMA) - Mozambique Komati Basin Water Authority (KOBWA) – South Africa Breede/Overberg Catchment Management Agency (BOCMA) - South Africa. Tripartite Technical Committee (TPTC) – Mozambique/South Africa Ministry for Coordination of Environmental Affairs (MICOA) – Mozambique National Environment Management Council (NEMC) - Tanzania National Environment Management Authority (NEMA) - Kenya Centre for Scientific and Industrial Research (CSIRO) – South Africa Ministry of Environment, Water and Natural Resources -Kenya
Output C.2.1 Institutional capacity for implementation of climate sensitive environmental flow assessments enhanced and supported by appropriate guidance, methodologies and networks at both national and regional level.		

Activity: C.2.1.1 Preparation of regional guidelines on EFA and building of regional and national capacity to undertake and update environmental flow assessments (EFAs).	Regional guidelines and or methodologies of EFA developed. National experts are trained on EFA through training workshops.	Department of Environmental Affairs and Tourism (the DEAT) Department of Water Affairs and Forestry (the DWAF) Tana and Athi Rivers Development Authority (TARDA) in Kenya Water Resources Management Authority (WARMA) - Kenya Rufiji Basin Development Authority (RUBADA) in Tanzania International Union for the Conservation of Nature (IUCN) World Wide Fund for Nature (WWF) Western Indian Ocean Marine Science Association (WIOMSA) Inkomati Catchment Management Agency (ICMA) - Mozambique Komati Basin Water Authority (KOBWA) – South Africa Breede/Overberg Catchment Management Agency (BOCMA) - South Africa. Tripartite Technical Committee (TPTC) – Mozambique/South Africa Ministry for Coordination of Environmental Affairs (MICOA) – Mozambique National Environment Management Council (NEMC) - Tanzania National Environment Management Authority (NEMA) - Kenya Centre for Scientific and Industrial Research (CSIRO) – South Africa Ministry of Environment, Water and Natural Resources -Kenya
Activity: C.2.1.2 Pilot development of an insitutional and regulatory framework for conjunctive management of river basins and coastal areas in at least one (1) priority site.	Insitutional and regulatory framework for conjunctive management of river basins and coastal areas developed	Department of Environmental Affairs and Tourism (the DEAT) Department of Water Affairs and Forestry (the DWAF) Tana and Athi Rivers Development Authority (TARDA) in Kenya Water Resources Management Authority (WARMA) - Kenya Rufiji Basin Development Authority (RUBADA) in Tanzania International Union for the Conservation of Nature (IUCN) World Wide Fund for Nature (WWF) Western Indian Ocean Marine Science Association (WIOMSA) Inkomati Catchment Management Agency (ICMA) - Mozambique Komati Basin Water Authority (KOBWA) – South Africa Breede/Overberg Catchment Management Agency (BOCMA) - South Africa. Tripartite Technical Committee (TPTC) – Mozambique/South Africa Ministry for Coordination of Environmental Affairs (MICOA) – Mozambique National Environment Management Council (NEMC) - Tanzania National Environment Management Authority (NEMA) - Kenya Centre for Scientific and Industrial Research (CSIRO) – South Africa Ministry of Environment, Water and Natural Resources -Kenya
Output D.1.1 ICZM protocol developed and adopted at the regional level.		

Activity: D.1.1.1 Finalization of the ICZM protocol and provision of support to participating countries to ratify the protocol at national level.	ICZM Protocol adopted by the Conference of Plenipotentiaries (COP).	Department of Environmental Affairs and Tourism (the DEAT) – South Africa Ministry of Environment and Forests (Direction Nationale de l'Environnement, Ministère de l'Environnement, des Forêts et des Stratégies Agricoles) - Comores Institut National de Recherché pour l'Agriculture, la Pêche et l'Environnement (INRAPE) - Comores Ministry of Environment & National Development Unit (MOE) - Mauritius Ministry of Coordination of Environmental Affairs (MICOA) - Mozambique National Environment Management Authority (NEMA) - Kenya National Environment Management Council (NEMC) - Tanzania Tanzania Forest Services (TFS) -Tanzania The Marine Parks and Reserves Authority (MPRA) –Tanzania Kenya Wildlife Service (KWS) - Kenya Kenya Forest Service (KFS) - Kenya Kenya Ministry of Environment, Water and Natural Resources - Kenya Ministry of Environment, Natural Resources and Transport -Seychelles Seychelles Planning Authority - Seychelles Kenya Marine and Fisheries Research Institute (KMFRI) –Kenya Coast Development Authority (CDA) - Kenya Tanzania Fisheries Research Institute (TAFIRI) - Tanzania National Parks and Conservation Service (NPCS) - Mauritius Seychelles National Parks Authority (SNPA) - Seychelles Centre for Sustainable Development of Coastal Zones - Mozambique Centre for Sustainable Development of Urban Zones - Mozambique International Union for the Conservation of Nature (IUCN) World Wide Fund for Nature (WWF) Western Indian Ocean Marine Science Association (WIOMSA)

Activity: D.1.1.2. Build capacity in participating countries for the implementation of the ICZM protocol (Linked to A 1.4.1).	Modalities for the integration of the requirements of the ICZM Protocol into the existing coastal planning and management mechanisms, established. Training of government officials in regional stakeholders training workshop on the implementation of the ICZM Protocol at national level.	Department of Environmental Affairs and Tourism (the DEAT) – South Africa Ministry of Environment and Forests (Direction Nationale de l'Environnement, Ministère de l'Environnement, des Forêts et des Stratégies Agricoles) - Comores Institut National de Recherché pour l'Agriculture, la Pêche et l'Environnement (INRAPE) - Comores Ministry of Environment & National Development Unit (MOE) - Mauritius Ministry of Coordination of Environmental Affairs (MICOA) - Mozambique National Environment Management Authority (NEMA) - Kenya National Environment Management Council (NEMC) - Tanzania Tanzania Forest Services (TFS) -Tanzania The Marine Parks and Reserves Authority (MPRA) –Tanzania Kenya Wildlife Service (KWS) - Kenya Kenya Forest Service (KFS) - Kenya Kenya Ministry of Environment, Water and Natural Resources - Kenya Ministry of Environment, Natural Resources and Transport -Seychelles Seychelles Planning Authority - Seychelles Kenya Marine and Fisheries Research Institute (KMFRI) –Kenya Coast Development Authority (CDA) - Kenya Tanzania Fisheries Research Institute (TAFIRI) - Tanzania National Parks and Conservation Service (NPCS) - Mauritius Seychelles National Parks Authority (SNPA) - Seychelles Centre for Sustainable Development of Coastal Zones - Mozambique Centre for Sustainable Development of Urban Zones - Mozambique International Union for the Conservation of Nature (IUCN) World Wide Fund for Nature (WWF) Western Indian Ocean Marine Science Association (WIOMSA)
Output D.1.2 LBSA protocol ratified in at least 4 countries and supported in all countries through the development of policy briefs, model legislation and capacity building to practitioners		

Activity: D.1.2.1. Support country processes for ratification of the LBSA protocol.	Model LBSA legislation and policy briefs on specific and current LBSA issues prepared and presented to practitioners/policy makers through national forums.	Department of Environmental Affairs and Tourism (the DEAT) – South Africa Ministry of Environment and Forests (Direction Nationale de l'Environnement, Ministère de l'Environnement, des Forêts et des Stratégies Agricoles) - Comores Institut National de Recherché pour l'Agriculture, la Pêche et l'Environnement (INRAPE) - Comores Ministry of Environment & National Development Unit (MOE) - Mauritius Ministry of Coordination of Environmental Affairs (MICOA) - Mozambique Ministry of Environment, Water and Natural Resources -Kenya National Environment Management Authority (NEMA) - Kenya National Environment Management Council (NEMC) - Tanzania Tanzania Forest Services (TFS) -Tanzania The Marine Parks and Reserves Authority (MPRA) –Tanzania Kenya Wildlife Service (KWS) - Kenya Kenya Forest Service (KFS) - Kenya Kenya Ministry of Environment, Water and Natural Resources - Kenya Ministry of Environment, Natural Resources and Transport -Seychelles Seychelles Planning Authority - Seychelles Kenya Marine and Fisheries Research Institute (KMFRI) –Kenya Coast Development Authority (CDA) - Kenya Tanzania Fisheries Research Institute (TAFIRI) - Tanzania National Parks and Conservation Service (NPCS) - Mauritius Seychelles National Parks Authority (SNPA) - Seychelles Centre for Sustainable Development of Coastal Zones - Mozambique Centre for Sustainable Development of Urban Zones - Mozambique International Union for the Conservation of Nature (IUCN) World Wide Fund for Nature (WWF) Western Indian Ocean Marine Science Association (WIOMSA)

Activity: D.1.2.2 Build capacity in participating countries to implement the LBSA protocol.	Awareness on the LBSA protocol created to policy makers in participating countries through national forums.	Department of Environmental Affairs and Tourism (the DEAT) – South Africa Ministry of Environment and Forests (Direction Nationale de l'Environnement, Ministère de l'Environnement, des Forêts et des Stratégies Agricoles) - Comores Institut National de Recherché pour l'Agriculture, la Pêche et l'Environnement (INRAPE) - Comores Ministry of Environment & National Development Unit (MOE) - Mauritius Ministry of Coordination of Environmental Affairs (MICOA) - Mozambique Ministry of Environment, Water and Natural Resources -Kenya National Environment Management Authority (NEMA) - Kenya National Environment Management Council (NEMC) - Tanzania Tanzania Forest Services (TFS) -Tanzania The Marine Parks and Reserves Authority (MPRA) –Tanzania Kenya Wildlife Service (KWS) - Kenya Kenya Forest Service (KFS) - Kenya Kenya Ministry of Environment, Water and Natural Resources - Kenya Ministry of Environment, Natural Resources and Transport -Seychelles Seychelles Planning Authority - Seychelles Kenya Marine and Fisheries Research Institute (KMFRI) –Kenya Coast Development Authority (CDA) - Kenya Tanzania Fisheries Research Institute (TAFIRI) - Tanzania National Parks and Conservation Service (NPCS) - Mauritius Seychelles National Parks Authority (SNPA) - Seychelles Centre for Sustainable Development of Coastal Zones - Mozambique Centre for Sustainable Development of Urban Zones - Mozambique International Union for the Conservation of Nature (IUCN) World Wide Fund for Nature (WWF) Western Indian Ocean Marine Science Association (WIOMSA)
Output D.1.3 Implementation of the WIO-SAP succeeds at national level through the coordination and guidance of interministerial committees and regional task forces.		

Activities: D.1.3.1. Provision of support to participating countries to monitor WIO-SAP project implementation and also monitor the state of the marine and coastal environment.	Project Management Unit (PMU), national and regional Task Forces, Steering Committee, Inter Ministerial Committee established to suport WIOSAP Project implementation.	Department of Environmental Affairs and Tourism (the DEAT) – South Africa Ministry of Environment and Forests (Direction Nationale de l'Environnement, Ministère de l'Environnement, des Forêts et des Stratégies Agricoles) - Comores Institut National de Recherché pour l'Agriculture, la Pêche et l'Environnement (INRAPE) - Comores Ministry of Environment & National Development Unit (MOE) - Mauritius Ministry of Coordination of Environmental Affairs (MICOA) - Mozambique Ministry of Environment, Water and Natural Resources -Kenya National Environment Management Authority (NEMA) - Kenya National Environment Management Council (NEMC) - Tanzania Tanzania Forest Services (TFS) -Tanzania The Marine Parks and Reserves Authority (MPRA) –Tanzania Kenya Wildlife Service (KWS) - Kenya Kenya Forest Service (KFS) - Kenya Kenya Ministry of Environment, Water and Natural Resources - Kenya Ministry of Environment, Natural Resources and Transport -Seychelles Seychelles Planning Authority - Seychelles Kenya Marine and Fisheries Research Institute (KMFRI) –Kenya Coast Development Authority (CDA) - Kenya Tanzania Fisheries Research Institute (TAFIRI) - Tanzania National Parks and Conservation Service (NPCS) - Mauritius Seychelles National Parks Authority (SNPA) - Seychelles Centre for Sustainable Development of Coastal Zones - Mozambique Centre for Sustainable Development of Urban Zones - Mozambique International Union for the Conservation of Nature (IUCN) World Wide Fund for Nature (WWF) Western Indian Ocean Marine Science Association (WIOMSA)

Activity D.1.3.2. Presentation of regular and timely briefings on the WIO-SAP Project to national inter-ministerycoordination committees, ocean policy task forces, water management authorities and other national environmental and marine policy bodies.	National inter-ministerial environmental coordination committees, ocean policy task forces, water management authorities and other national environmental and marine policy bodies, informed on the project.	Department of Environmental Affairs and Tourism (the DEAT) – South Africa Ministry of Environment and Forests (Direction Nationale de l'Environnement, Ministère de l'Environnement, des Forêts et des Stratégies Agricoles) - Comores Institut National de Recherché pour l'Agriculture, la Pêche et l'Environnement (INRAPE) - Comores Ministry of Environment & National Development Unit (MOE) - Mauritius Ministry of Coordination of Environmental Affairs (MICOA) - Mozambique Ministry of Environment, Water and Natural Resources -Kenya National Environment Management Authority (NEMA) - Kenya National Environment Management Council (NEMC) - Tanzania Tanzania Forest Services (TFS) -Tanzania The Marine Parks and Reserves Authority (MPRA) –Tanzania Kenya Wildlife Service (KWS) - Kenya Kenya Forest Service (KFS) - Kenya Kenya Ministry of Environment, Water and Natural Resources - Kenya Ministry of Environment, Natural Resources and Transport -Seychelles Seychelles Planning Authority - Seychelles Kenya Marine and Fisheries Research Institute (KMFRI) –Kenya Coast Development Authority (CDA) - Kenya Tanzania Fisheries Research Institute (TAFIRI) - Tanzania National Parks and Conservation Service (NPCS) - Mauritius Seychelles National Parks Authority (SNPA) - Seychelles Centre for Sustainable Development of Coastal Zones - Mozambique Centre for Sustainable Development of Urban Zones - Mozambique International Union for the Conservation of Nature (IUCN) World Wide Fund for Nature (WWF) Western Indian Ocean Marine Science Association (WIOMSA)
OUTPUT D.1.4: Establishment of a funding pipeline to support long-term implementation of the SAP through Nairobi Convention including coordination of stakeholders and facilitation of learning and exchange in support of WIOSAP project implementation.		

Activities: D.1.4.1. Develop capacity of the WIO-SAP project management, coordination of learning and exchange and support for implementation of the Nairobi Convention and other regional legal frameworks.	WIOSAP Project Management Unit and regional Task Forces established within the framework of the Nairobi Convention.	Department of Environmental Affairs and Tourism (the DEAT) – South Africa Ministry of Environment and Forests (Direction Nationale de l'Environnement, Ministère de l'Environnement, des Forêts et des Stratégies Agricoles) - Comores Institut National de Recherché pour l'Agriculture, la Pêche et l'Environnement (INRAPE) - Comores Ministry of Environment & National Development Unit (MOE) - Mauritius Ministry of Coordination of Environmental Affairs (MICOA) - Mozambique Ministry of Environment, Water and Natural Resources -Kenya National Environment Management Authority (NEMA) - Kenya National Environment Management Council (NEMC) - Tanzania Tanzania Forest Services (TFS) -Tanzania The Marine Parks and Reserves Authority (MPRA) –Tanzania Kenya Wildlife Service (KWS) - Kenya Kenya Forest Service (KFS) - Kenya Kenya Ministry of Environment, Water and Natural Resources - Kenya Ministry of Environment, Natural Resources and Transport -Seychelles Seychelles Planning Authority - Seychelles Kenya Marine and Fisheries Research Institute (KMFRI) –Kenya Coast Development Authority (CDA) - Kenya Tanzania Fisheries Research Institute (TAFIRI) - Tanzania National Parks and Conservation Service (NPCS) - Mauritius Seychelles National Parks Authority (SNPA) - Seychelles Centre for Sustainable Development of Coastal Zones - Mozambique Centre for Sustainable Development of Urban Zones - Mozambique International Union for the Conservation of Nature (IUCN) World Wide Fund for Nature (WWF) Western Indian Ocean Marine Science Association (WIOMSA)

Activity: D.1.4.2. Strengthening the capacity of national structures including, the Nairobi Convention Focal Points to provide overseer the WIO-SAP project implementation.	Project Steering Committee and regional Inter-Ministerial Committee established tooversee the implementation of the project.	Department of Environmental Affairs and Tourism (the DEAT) – South Africa Ministry of Environment and Forests (Direction Nationale de l'Environnement, Ministère de l'Environnement, des Forêts et des Stratégies Agricoles) - Comores Institut National de Recherché pour l'Agriculture, la Pêche et l'Environnement (INRAPE) - Comores Ministry of Environment & National Development Unit (MOE) - Mauritius Ministry of Coordination of Environmental Affairs (MICOA) - Mozambique Ministry of Environment, Water and Natural Resources -Kenya National Environment Management Authority (NEMA) - Kenya National Environment Management Council (NEMC) - Tanzania Tanzania Forest Services (TFS) -Tanzania The Marine Parks and Reserves Authority (MPRA) –Tanzania Kenya Wildlife Service (KWS) - Kenya Kenya Forest Service (KFS) - Kenya Kenya Ministry of Environment, Water and Natural Resources - Kenya Ministry of Environment, Natural Resources and Transport -Seychelles Seychelles Planning Authority Kenya Marine and Fisheries Research Institute (KMFRI) Coast Development Authority (CDA) - Kenya Tanzania Fisheries Research Institute (TAFIRI) National Parks and Conservation Service (NPCS) - Mauritius Seychelles National Parks Authority (SNPA) Centre for Sustainable Development of Coastal Zones Centre for Sustainable Development of Urban Zones International Union for the Conservation of Nature (IUCN) World Wide Fund for Nature (WWF) Western Indian Ocean Marine Science Association (WIOMSA)
Activity: D.1.4.3. Support the establishment and operationalisation of the regional coordination and implementation structures.	Working groups established and lead institutions identified for PADH, WSQ, MWM and EFA.	Department of Environmental Affairs and Tourism (the DEAT) – South Africa Ministry of Environment and Forests (Direction Nationale de l'Environnement, Ministère de l'Environnement, des Forêts et des Stratégies Agricoles) - Comores Institut National de Recherché pour l'Agriculture, la Pêche et l'Environnement (INRAPE) - Comores Ministry of Environment & National Development Unit (MOE) - Mauritius Ministry of Coordination of Environmental Affairs (MICOA) - Mozambique Ministry of Environment, Water and Natural Resources -Kenya National Environment Management Authority (NEMA) - Kenya National Environment Management Council (NEMC) - Tanzania Ministry of Environment, Natural Resources and Transport -Seychelles
OUTPUT D.2.1: Existing Nairobi Convention Clearing House Mechanism expanded to incorporate information on national and regional investments and projects, climate variability and change, guidelines, methodologies and success stories, among others.		

Activities: D.2.1.1. Improvement of the existing Nairobi Convention Clearing House Mechanism to facilitate access to priority policy and technical guidelines, reports, standards and success stories.	The Regional Clearing House Mechanism updated to new information in the WIO Region	Department of Environmental Affairs and Tourism (the DEAT) – South Africa Ministry of Environment and Forests (Direction Nationale de l'Environnement, Ministère de l'Environnement, des Forêts et des Stratégies Agricoles) - Comores Institut National de Recherché pour l'Agriculture, la Pêche et l'Environnement (INRAPE) - Comores Ministry of Environment & National Development Unit (MOE) - Mauritius Ministry of Coordination of Environmental Affairs (MICOA) - Mozambique Ministry of Environment, Water and Natural Resources -Kenya National Environment Management Authority (NEMA) - Kenya National Environment Management Council (NEMC) - Tanzania Ministry of Environment, Natural Resources and Transport -Seychelles Kenya Marine and Fisheries Research Institute (KMFRI)
Activity: D.2.1.2. Development of institutional and financial capacity for sustaining knowledge management and regional stakeholder's platforms and networks.	Government officials and project partners are trained on the operations of the Clearing House Mechanism and create awareness in their countries.	Department of Environmental Affairs and Tourism (the DEAT) – South Africa Ministry of Environment and Forests (Direction Nationale de l'Environnement, Ministère de l'Environnement, des Forêts et des Stratégies Agricoles) - Comores Institut National de Recherché pour l'Agriculture, la Pêche et l'Environnement (INRAPE) - Comores Ministry of Environment & National Development Unit (MOE) - Mauritius Ministry of Coordination of Environmental Affairs (MICOA) - Mozambique Ministry of Environment, Water and Natural Resources -Kenya National Environment Management Authority (NEMA) - Kenya National Environment Management Council (NEMC) - Tanzania Tanzania Forest Services (TFS) The Marine Parks and Reserves Authority (MPRA) –Tanzania Kenya Wildlife Service (KWS) Kenya Forest Service (KFS) Kenya Ministry of Environment, Water and Natural Resources Ministry of Environment, Natural Resources and Transport -Seychelles Seychelles Planning Authority Kenya Marine and Fisheries Research Institute (KMFRI) Coast Development Authority (CDA) - Kenya Tanzania Fisheries Research Institute (TAFIRI) National Parks and Conservation Service (NPCS) - Mauritius Seychelles National Parks Authority (SNPA) Centre for Sustainable Development of Coastal Zones - Mozambique International Union for the Conservation of Nature (IUCN) World Wide Fund for Nature (WWF) Western Indian Ocean Marine Science Association (WIOMSA)
OUTPUT D.2.2: Established science-policy exchange platform under the Nairobi Convention for policy and for consensus on key LBSA and ICZM issues in the WIO Region.		

Activities: D.2.2.1. Development of a medium-term science for policy programme to: (i) provide scientific advice required for priority policy decisions, (ii) articulate regional LBSA concerns in national, regional and global fora, and (iii) mobilise support for implementation of the WIOSAP project activities and SAP in general.	Science for policy programme is established and policy briefs on LBSA and ICZM issues are presented in scheduled meetings of the RECs' environment, water or marine ministers, including specific meetings between coastal/marine scientists and policy makers.	Department of Environmental Affairs and Tourism (the DEAT) – South Africa Ministry of Environment and Forests (Direction Nationale de l'Environnement, Ministère de l'Environnement, des Forêts et des Stratégies Agricoles) - Comores Institut National de Recherché pour l'Agriculture, la Pêche et l'Environnement (INRAPE) - Comores Ministry of Environment & National Development Unit (MOE) - Mauritius Ministry of Coordination of Environmental Affairs (MICOA) - Mozambique Ministry of Environment, Water and Natural Resources -Kenya National Environment Management Authority (NEMA) - Kenya National Environment Management Council (NEMC) - Tanzania Tanzania Forest Services (TFS) -Tanzania The Marine Parks and Reserves Authority (MPRA) –Tanzania Kenya Wildlife Service (KWS) - Kenya Kenya Forest Service (KFS) - Kenya Kenya Ministry of Environment, Water and Natural Resources - Kenya Ministry of Environment, Natural Resources and Transport -Seychelles Seychelles Planning Authority - Seychelles Kenya Marine and Fisheries Research Institute (KMFRI) –Kenya Coast Development Authority (CDA) - Kenya Tanzania Fisheries Research Institute (TAFIRI) - Tanzania National Parks and Conservation Service (NPCS) - Mauritius Seychelles National Parks Authority (SNPA) - Seychelles Centre for Sustainable Development of Coastal Zones - Mozambique Centre for Sustainable Development of Urban Zones - Mozambique International Union for the Conservation of Nature (IUCN) World Wide Fund for Nature (WWF) Western Indian Ocean Marine Science Association (WIOMSA)
Activity: D.2.2.2. Support regional scientific platforms and networks to coordinate and implement the WIOSAP Project through partnerships, collaboration, specialized centers of excellence and capacity building.	WIO-C, FARI and WIOMSA are supported in order to consolidate the engagement of research institutions and universities as activity centres for the implementation of various activities of the project.	International Union for the Conservation of Nature (IUCN) World Wide Fund for Nature (WWF) Wetlands International Birdlife International East Africa Wildlife Society (EAWS) Western Indian Ocean Marine Science Association (WIOMSA) Forum for Academic and Research Institutions (FARI) Coastal Oceans Research & Development in the Indian Ocean (CORDIO) Inter-Governmental Oceanographic Commission of UNESCO

APPENDIX 25: THE PROPOSED PROCESS FOR SELECTION OF ON-THE-GROUND INTERVENTIONS

BACKGROUND

The Transboundary Diagnostic Analysis (TDA) produced by the UNEP/GEF Project Addressing Land-based Activities in the Western Indian Ocean (WIO-LaB) identified **priority issues** and **potential areas of intervention** related to land-based sources and activities that impact on the marine and coastal environment. The priority issues targeted for implementation are therefore: Physical alteration and destruction of habitats; Water and sediment quality deterioration due to pollution; Alteration in freshwater flows and sediment loads from rivers and inadequate governance systems and awareness.

Further, the TDA also identified several sites as the **main hotspots** of Physical Alteration and Destruction of Habitats (PADH), pollution and river-coast interaction in the region. The TDA broadly defined hotspots as coastal and marine areas threatened by human activities. PADH hotspots are located at sites with important human activities, such as estuaries, islands, harbours, bays and lagoons. These sites are threatened predominantly by pollution, over-exploitation of coastal-marine resources (e.g. mangroves and fisheries) and habitat modification. While those related to river-coast interaction include those with measurable impacts on the immediate marine ecology associated with them. These include rivers such as Pangani, Athi-Sabaki, Incomati, Zambezi, and Betsiboka.

Implementation of the on-the-ground interventions is considered to be the most effective mechanism for achieving the short-term (within five years) stress reduction targets set in the SAP. It is for this reason, the selected on-the-ground interventions will be based entirely on the priority list of hotspots identified during the TDA process. In all stages from selection to the actual implementation of the on-the-ground interventions, specific attention will be given to socio-economic aspects especially that the appropriate gender analysis is part of the considerations as well as ensuring the widest stakeholder participation, including civil society and special interest groups such as women's groups.

Parties to the Nairobi Convention and WIO SAP implementing partners met in Nairobi in November 2014 to both update and validate baseline information as well as discuss the process by which on the ground activities would be prioritized to ensure stress reduction impact, replication potential and sustainability (among other criteria). Partners proposed to set up a clear prioritisation process for the selection of on the ground activities to be implemented in the inception phase of the WIO SAP project in line with the SAP intervention logic, clear selection criteria and reflecting the current realities in countries.

Intervention logic

The fundamental logic is to assist countries in implementing their agreed regional strategy with particular emphasis on country-led execution of activities which will have timely measurable outcomes, generate local and gender sensitive solutions to the environmental challenges and provide a basis for replication and lessons. The national work programs will favour generation of local impacts rather than developing new national strategies or plans but will support these initiatives if already programmed. The project will be driven by and responsive to country demand demonstrated through co-financing and community support (the term 'community' is used in both a narrow sense of a village or district and in the broad sense of diverse stakeholders with particular attention given to special interest groups, civil society and gender considerations). Essentially the project will be country led, regionally coordinated and demand driven, requiring substantial country responsibility and accountability for project operations, including private sector engagement in structuring incentives for sustainable use. The project rationale builds off the threat and response assessments set out in the TDA and SAP by maintaining all the PIF physical targets (habitats, water, rivers and governance); by allowing countries to select specific targets within each component and by

responding to the recommendations made in the PIF STAP review to generate synergies across project components.

PROCEDURE

The following is the procedure for development and approval of the proposed on-the-ground interventions. Part of the process will be undertaken during the Inception Phase and the other part during the Implementation Phase.

I. INCEPTION PHASE:

a) Establishment of National Implementation Committees.
b) Adoption of the selection criteria by the National committee,
c) Adoption of TORs for the Regional Technical Review Committee and the establishment of the Committee.
d) Development of an implementation plan for interventional projects (regional and national level) and a workshop to review the implementation plan including an agreement on the thematic areas for interventions.

II. IMPLEMENTATION PHASE:

a) Call for proposal; this will be accompanied by clear guidelines on the selection process and criteria, targeting SAP implementation, stress reduction and special attention given to gender considerations.
b) Process

The process for development and selection of on-the-ground intervention projects will entail two stages:

i) **Submission of project concepts:** All the project concept notes will be submitted to the PMU. However, the initial reviewing and selection of the submitted concept notes will be done at the national level by the National Implementing Committee or a panel established by the National Implementing Committee. Each country will forward a maximum of three concepts to the WIOSAP PMU for further reviewing and shortlisting of concepts that will be invited to submit full proposals. The second review will be by a relevant Regional Technical Committee. The PMU will review national project proposals to ensure the projects concepts are; a) within budgets, b) thematically relevant and are supportive of the SAP implementation and stress reduction targets, c) have policy relevance at the national level and have a demonstrative value at the regional level; d) demonstrate gender sensitivity and are e) innovative.

ii) **Prioritisation of concepts**: The PMU will prioritise and submit all proposals to a Regional technical committee (s), that will request proponents for successful concepts to develop full proposals. Guidelines will be developed to support this development including clear indication of SAP targets, stress reduction impact sought and gender considerations.

iii) **Submission of full proposals:** The full project proposals will be reviewed by the Regional Committee or Committees that reviewed the PMUs priority list. The recommendations of the Committee or Committees will be forwarded to the Project Steering Committee for the final decision. Depending on the need and as recommended

by the Regional Committee, the Steering Committee may approve the projects as submitted or approve with a provision for further improvement including technical and financial support from the project to address identified weaknesses.

The Steering Committee will base its decisions on the advice of the Regional Committee or Committees, and can only deviate from this advice when procedures have not been adhered to or the Regional Committee did not take into account other pertinent information about the proposed project, which is available to the Steering Committee.

Selection Criteria

Both the national and regional priorities and approaches have been identified and formalised through the TDA and SAP processes. Twenty nine (29) of these activities with associated targets (SAP, pages 33-60), timescales and indicators have been identified in the SAP. Given the limited financing and the human and institutional resource constraints the 29 activities have been consolidated into manageable project components and priority physical or geographic targets (e.g. ports, watersheds, or coastal areas) identified and prioritised at national and community levels based on the following criteria:

Criterion	**Examples in each of the objectives**		
	Habitats	**Waters**	**Rivers**
Demonstrated economic importance and cost effeciency	Ramsar site, MPA, coastal protection asset, new port development	Health of public beaches, contamination of fish, contamination of drinking water	New dam/ irrigation scheme, mining expansion, level of threat
Community engagement and co-financing available	Community conservation plan; Beach litter programme	District council sewage scheme planned, recycling initiatives	Pending transboundary river agreement; IWBM plan in preparation
Proven technical solution	Replanting mangroves	Application of MARPOL in port	Existing mechanism to include flow valuations in discussion of trade-offs
Discrete and manageable	MPA, major dive site	Major tourist beach with strong tourism association	Minor watershed with limited no. of stakeholders. Specific transboundary flow (e.g. mining effluent)
Potential for replication	Permanent dive boat anchoring financed by dive boat operators	Financing model for community sewage treatment	Upstream/ downstream district council agreements and potential for PES
Realistic sustainable financing options	MPA admission fees, tourist levies	Tourists will pay more for cleaner beaches	Raised awareness of water valuation
Synergies across the geographies	New port near MPA requires reef blasting and dredging	New port has mining terminal with potential for spillages	New port, mining and new settlements requires increased water abstraction

- **Relevance of the proposal:** The proposal should clearly address TDA/SAP priorities; (short and medium term hotspots/ stress reduction potential) and generally demonstrate linkages between its objectives and the WIO-SAP project objectives as well as relevant issues identified in the SAP. The proposals should specifically align with at least two components of the WIO-SAP Project and demonstrate its contribution towards achieving the WIO-SAP project outcomes including national policy relevancy.

The proposal should demonstrate regional importance or transboundary value and be in line with the list of identified hotspots in the TDA and national priorities as specified in the NEAP/NAP and other similar documents.

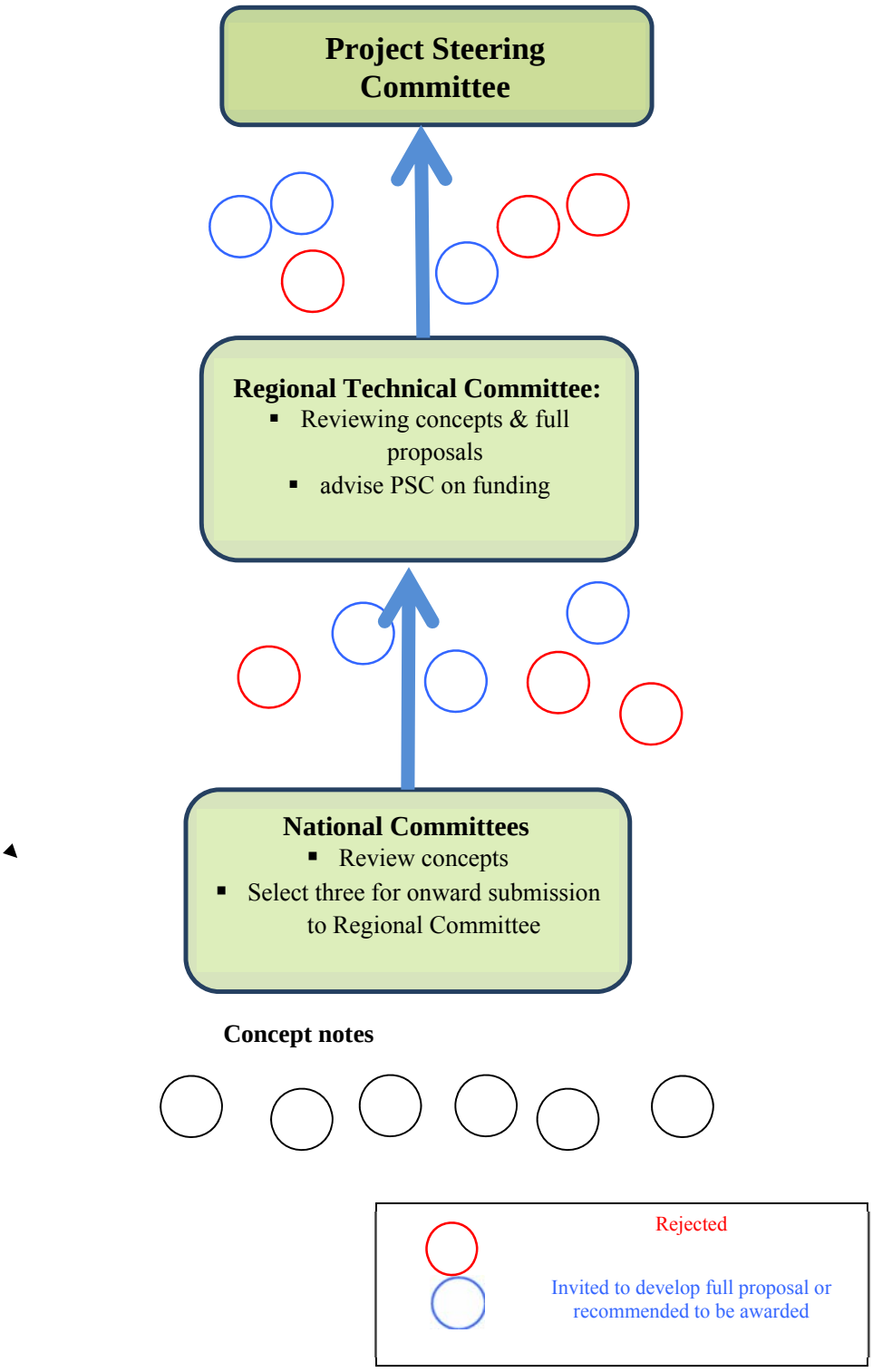
- **Multi-institutional:** Collaboration between several institutions is encouraged to help maximize efforts as well as foster learning, sharing and replication of project outcomes. Collaboration between institutions will be an essential and key component of the WIO-SAP-supported projects.

- **Participatory project design:** The proposal should originate from consultations and wide engagement with stakeholders, including the beneficiaries and target group of the project and with emphasis on particular interest groups and gender considerations (in line with the gender guidelines developed as part of the implementation plan). The proposal should show how the project stakeholders were involved in designing and preparing the proposal.

- **Cost effectiveness and Leverage co-funding:** It is expected that the project will meet cost effectiveness criteria as well as leverage co-funding, either in cash or in-kind from sources within and outside their countries. It is possible that at the concept stage, it will be difficult to state the actual co-funding amount. In such cases, applicants should state tentative co-funding amount, source, secured or unsecured and what project activities could potentially be supported by these funds.

- **Sustainability of the action:** The proposal should show how sustainability will be secured after completion of the action. This can include aspects of necessary follow-up activities including potential for replication, built-in strategies, ownership etc., if any.

- **Innovative value in terms of proven solution:** Priority will be given to proposals aiming at improving existing and/or developing new and innovative tools, approaches, mechanisms and technologies for effective management of critical habitats and waste water.



Proposed process for selection on-the ground interventions

APPENDIX 26: PROJECTS IMPLEMENTED IN WIO REGION BETWEEN 2010-2015 OF DIRECT RELEVANCE TO WIO-SAP COMPONENTS

Country	Name of project/programme	WIO-SAP Component			
		A	B	C	D
Comoros	GIRE (Gestion Intégrées des ressources en eau)	✓			
	Contribution à la gestion durable et à la conservation du milieu marin dans la zone Sud-est de l'océan indien	✓			
Kenya	Development of ICZM Awareness Strategy				✓
	Development of second edition of Kenya State of the Coast Report	✓	✓	✓	✓
	Development of Malindi-Sabaki estuary area integrated management plan			✓	
	Development of Tana Delta management plan			✓	
Madagascar	Mise en place d'un réseau d'observatoires et de suivi de la pollution marine à Mahajanga, Toamasina, Vangaindrano et Toliara		✓		
	Schémas Directeur d'Aménagement et de Gestion intégrée des Ressources en Eau (SDAGIRE) des six Grands Bassins versant de Madagascar			✓	
Mauritius	Rehabilitation of beaches	✓			
	Beach Programme Re-profiling	✓			
	Zoning of Lagoons	✓			
Mozambique	Shared Water courses (Save, Buzi, Rovuma)			✓	
	National Water Resources Development Project			✓	
	Zambezi agreement info sharing / dam management			✓	
Seychelles	Restoration of mangrove colony on Curieuse	✓			
	Review and update of Wetlands policy	✓			
	Solid waste management		✓		
	Beach sanitation program	✓			
Tanzania	Oil for Development	✓			
	Tanzania Strategic Cities Project		✓		
	Pwani	✓			
	Wami river project			✓	
Somalia	Enhancing Climate Resilience of the Vulnerable Communities and Ecosystems in Somalia	✓			
	Rural Livelihood's Adaptation to Climate Change in the Horn of Africa -Phase II (RLACC II)	✓			

Organisation	Name of project/programme	WIO-SAP Component			
		A	B	C	D
Birdlife International	Livelihoods and Sustainable use	✓			
	Marine IBA identification – seabird programme	✓			
	Wetlands management	✓			
	IBA Monitoring	✓			
	WildLife Clubs of Africa	✓			
CORDIO	Coral reef surveys and assessments (long term monitoring)	✓			
	Is there a core region (coral triangle) in the WIO?	✓			✓
	Incorporating reef fish spawning aggregations into optimal designs for no-take fishery reserves: Improving fisheries management and coral reef resilience in the WIO	✓			
	Migrant fishers and fishing in the Western Indian Ocean: Socio-economic dynamics and implications for management	✓			✓
	Sustainable fisheries: testing methods for improving livelihoods in coastal communities in northern Kenya	✓			✓
	SocioEconomic Monitoring programme of the Western Indian Ocean	✓			✓
	Environmental Education - Schools to the Sea programme				✓
	Environmental Education - Teacher Training programme in using EE in the classroom				✓

Organisation	Name of project/programme	WIO-SAP Component			
		A	B	C	D
EAWLS	Creating an enabling environment for wise use and management of wetland biodiversity through wetland policy advocacy	✓	✓	✓	✓
	Sustainable conservation and management of Kenya's Marine and coastal resources (Shimoni, Majoreni and Vanga)	✓			
	Community managed marine conservation area, Kuruwitu-Kilifi- Kenya	✓			
	East African Marine Ecoregion National Steering Committee - Kenya	✓			✓
	Water governance and sanitation	✓	✓	✓	✓
IUCN	Entrenching livelihoods enhancement and diversification in the development and implementation of a new MPA in Tanga Region, Tanzania, and supporting associated policy	✓			✓
	Mangroves for the Future Western Indian Ocean Component	✓			✓
	Participatory planning for the establishment of an MPA in Tanga	✓			✓
	Enabling management of Somaliland's first MPA	✓			✓
	Conservation of Aquatic Eco-Systems in Tanzania's Northern Seascape: The COAST/PWANI Project	✓			✓
	Situational analyses for the Wami and Ruvu river basins	✓	✓	✓	✓
	The Pangani River Basin Management Project (PRBMP): Second Phase			✓	✓
	Pangani River Basin Management Project – UNDP – GEF component			✓	✓
	Global Water Initiative/Running Dry				✓
WCS	Coral Reef Monitoring (biophysical and socio-economic)	✓			✓
	Alternative livelihoods	✓			✓
	Anthropogenic impacts on coral reefs	✓			✓
	Climate change and coral reefs	✓			✓
	MPAs, their impacts, and effectiveness	✓			✓
	Reefs and people	✓			✓
	Ocean giants	✓			
	Valuation of coastal habitats	✓			✓
	CBOs and coastal governance	✓			✓
Wetlands International	African Waterbird Census	✓			✓
	Wings Over Wetlands	✓			✓
	Wetlands & Livelihoods Programme	✓			✓
	Biofuels & Wetlands	✓			
WIOMSA	Support to Western Indian Ocean Marine Association (WIOMSA)	✓			✓
	The Sustainable Coastal Communities and Ecosystems (SUCCESS)	✓			✓
	Pearl farming and jewellery making in Zanzibar: Empowering women economically	✓			
	Sustainable Milkfish Farming: Cost-Effective Methods to Increase Food Supply, Incomes and Employment in Mtwara/Lindi, Tanga and Pemba Coastal Communities	✓			
	An economic valuation of coastal and marine ecosystem services in the WIO to identify specific beneficiaries, and the role of marine protected areas in ensuring that these services are sustained	✓			✓
	Seagrass and Sea Urchins Interactions - Overgrazing and resource use in the WIO region	✓			✓
	Developing management practices for ecosystem resilience: Functional group analysis of the degraded Grand Récif de Toliara, Madagascar	✓			
	Preparing for Climate Change through the Assessment of Biodiversity and Management Preferences across a Scale of Environmental Variation in the Western Indian Ocean	✓			✓

Organisation	Name of project/programme	WIO-SAP Component			
		A	B	C	D
	The effectiveness of community-based organizations in managing coral reefs in the Western Indian Ocean	✓			✓
	The Relationship between Community-Based Organizations and Effective Management of Coastal and Marine Resources in the WIO region	✓			
	Analysis of Benefits from Coastal Resources and Mechanisms for Equitable Benefit Sharing in Selected WIO Countries	✓			✓
	Global Markets and the Livelihoods of Coastal Communities in the WIO Countries: Implications for Sustainable Coastal Management	✓			✓
	Migrant fishers and fishing in the Western Indian Ocean: Socio-economic dynamics and implications for management	✓			
	Small-scale community-based, grow-out aquacultures of mud crabs Scylla serrata as a sustainable livelihood in East Africa	✓			
	Is there a Western Indian Ocean "coral triangle"?	✓			✓
WWF EAME	Marine and Coastal Forest Ecoregional Support Programmes	✓			✓
	Coastal Forest Protected Area System in Kenya	✓			
	Sustainable livelihoods in Kwale Landscape.	✓			
	Ecoregion Action Programmes (Eastern Arc)	✓			✓
	CSO capacity building project in Tanzania	✓			✓
	Payment for Environmental Services (PES)	✓			
	Oil for Development Project (Ke, Tz, Mz)	✓			✓
	WWF Sustainable Fisheries Programme for Ke, Tz and Mz	✓			✓
	Marine Fisheries Certification Programme	✓			✓
	Lower Zambezi River Conservation Programme	✓		✓	✓
	Climate Change Vulnerability Assessment and Development of Adaptation Strategies for Mangroves and Coral reef	✓			
	SCaFCom (Tanzania) and RaCCom (Kenya) Projects	✓			
	Ruaha River Catchments Project	✓		✓	✓
	Kwale Landscape Restoration Project	✓			
	Udzungwa Mountaine Forest Conservation Project	✓			
	Eastern Arc Mountain Conservation endowment Fund (EAMCEF)	✓			✓
	Sustainable financing of MPAs in Mozambique	✓			✓
	RUMAKI Seascape Programme	✓			
	Primeiras and Segundas Conservation Area	✓			
	Quirimbas MPA (Mozambique)	✓			
	Mnazi Bay MPA (Tanzania)	✓			
	Mafia Island MPA (Tanzania)	✓			
	Kiunga MPA (Kenya)	✓			
WWF MWIOPO					

7.3.1.1 International Organisations

Organisation	Name of project/programme	WIO-SAP Component			
		A	B	C	D
UNEP	Nairobi Convention Clearinghouse Mechanism	✓			✓
	Cleaner Production Technology Centres		✓		
	Global Programme of Action for the Protection of the Marine and Coastal Environment from Land-based Sources and Activities (GPA)	✓	✓	✓	✓
UNDP	Agulhas and Somali Current Large Marine Ecosystems Project (ASCLME)	✓			✓

Organisation	Name of project/programme	WIO-SAP Component			
		A	B	C	D
World Bank	South Western Indian Ocean Fisheries Project	✓			✓
	WIOFISH	✓			✓
	Marine and Coastal Environmental management Project (MACEMP)	✓	✓		✓
	Western Indian Ocean Marine Highway Development and Coastal and Marine Contamination Prevention Project	✓	✓		✓
UNIDO	Coastal Tourism	✓	✓		✓
	Cleaner Production Technology Centers		✓		
IOC-UNESCO	Ocean Data and Information Network for Africa (ODINAFRICA)				✓
	Improving Emergency Response to Ocean-based Extreme Events through Coastal Mapping Capacity Building in the Indian Ocean (COAST-MAP-IO)	✓			✓
	Capacity Development Programme in the Western Indian Ocean Region	✓	✓		✓
	Climate Variability and Predictability (CLIVAR)	✓		✓	
	Global Ocean Observation System (GOOS)	✓			✓

7.3.1.2 Inter-Governmental Organisations

Organisation	Name of project/programme	WIO-SAP Component			
		A	B	C	D
Indian Ocean Commission (IOC)	Regional Programme for the Sustainable Management of the Coastal Zones of the Indian Ocean Countries (ReCoMaP)	✓	✓		✓
	Marine Protected Areas Network of the Indian Ocean Commission	✓			
	African Monitoring of Environment for Sustainable Development (AMESD)	✓	✓	✓	✓
	WIO Cetacean Conservation and Research	✓			
	Climate Change Adaptation in the WIO States	✓		✓	✓
	Western Indian Ocean Marine Highway Development and Coastal and Marine Contamination Prevention Project	✓	✓		✓
	Environmental Education Programme (ARPEGE)				✓