



### **UNEP-GEF WIO-Lab PROJECT**

# ADDRESSING LAND BASED ACTIVITIES IN THE WESTERN INDIAN OCEAN

# ANNUAL REPORT 2006

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Addressing Land Based Activities in the Western Indian Ocean



#### **Summary**

The broad goal of the Project "Addressing land-based Activities in the Western Indian Ocean (WIO-LaB)" is to address the degradation of the marine and coastal environment due to land-based activities in countries bordering the Western Indian Ocean (WIO). The Project is designed to serve as a demonstration project of UNEP's Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA) and aims to achieve three specific objectives: (i) Improve the information base and demonstrate guidelines and strategies for the reduction of stress to the ecosystem by improved water and sediment quality; (ii) Strengthen the regional legal basis for preventing land-based sources of pollution; and (iii) Develop regional capacity and strengthen institutions for sustainable, less polluting development.

The WIO-LaB Project is being implemented by the United Nations Environment Programme (UNEP) and executed by the United Nations Office for Project Services (UNOPS) and the UNEP/Nairobi Convention Secretariat (NCS). The main financial partners are the Global Environment Facility (GEF) and the Government of Norway, contributing respectively US\$ 4,511,140 and US\$ 3,395,650. Countries participating in the Project are Kenya, Tanzania, Mozambique, South Africa, Seychelles, Comoros, Madagascar and Mauritius. Project activities in these participating countries are coordinated by the National Focal Point Institutions (NFPIs) for the Nairobi Convention.

By December 2006, the WIO-LaB Project had completed its second year of implementation, and had therefore reached its halfway mark. As will be noted in this report, the implementation of the Project is still on course, despite delays in the initiation of certain activities. The main bottleneck in the implementation of the project activities has been the limited capacity (both in terms of human and financial resources) of the NFPIs. This problem has now been partly resolved through the provision of financial support to those institutions through the Project as well as the Nairobi Convention Secretariat under its Trust Fund. Project activities that initially had a relatively slow start, are now on course for timely completion within the context of the overall project workplan. The project workplan has undergone a number of revisions in order to address changes required and to keep it abreast with ongoing processes.

Over the past two years, extensive partnerships have been established with institutions and organizations from within and outside of the project region. Apart from the main project financiers, the Global Environment Facility (GEF) and the Government of Norway, the in-kind support (mainly in the form of staff time) received from partner institutions amounted to US\$ 979,950 and the cash contributions amounted to US\$ 249,500. The new and/or strengthened partnerships have also increased the regional and international visibility of the UNEP/Nairobi Convention.

Most of the planned project activities are in the process of implementation. The Lead National Institutions have already prepared their draft National Pollution Status Reports that provide latest data and information with regard to coastal/marine water and sediment quality. Also, most of the Lead National Institutions have prepared proposals for the implementation of National Water and Sediment Quality Monitoring Programmes that will be implemented commencing the first quarter of 2007 under the framework of a Regional Water and Sediment Quality Monitoring Programme. Nine Demonstration Projects are in various stages of execution, most either in or close to full-scale implementation. The WIO-LaB Project Management Unit (PMU) provided support to the proponents of demonstration projects in order to enable them to prepare detailed project documents that meets the required standards.

Meanwhile, regional assessment of the existing status of Municipal Wastewater Management as well as a regional review of UNEP/GPA Municipal Wastewater Guidelines is in progress in almost all the participating countries. Also, an additional activity, not originally foreseen in the Project Document,

concerning an assessment of issues related to Marine Litter in the WIO was initiated in cooperation with the UNEP/Regional Seas Programme. The assessment is currently at an advanced stage of completion following receipt of the draft Regional Report from the Consultant. The findings of the latter activity that is implemented with the support of UNEP/Regional Seas Programme, will contribute to the TDA/SAP process that will be launched by the end of the second quarter of 2007.

A review of National Policy, Legal and Institutional frameworks, including the status of ratification of environmental conventions relevant to land-based sources and activities has been undertaken successfully in almost all of the participating countries. Reports based on these reviews have been endorsed by national Legal Task Forces or related national processes. Activity on the development of a new Protocol on Land-based Sources and Activities for the UNEP/Nairobi Convention is almost completed following the drafting and review of the first draft version of the Protocol by the Regional Legal and Technical Review Regional Task Forces. The second version of the Protocol that took onboard the recommendations of participating countries has been drafted and is presently undergoing national-level review.

The WIO-LaB Project also initiated the development of Regional Guidelines on Environmental Impact Assessment (EIA) for the assessment of transboundary and cumulative environmental impacts in the WIO Region. The draft version of these Guidelines has been prepared including also a draft report on existing policies, regulatory and institutional frameworks with regard to EIA in participating countries.

The implementation of an Integrated Coastal Area and River Basin Management (ICARM) demonstration project on the Incomati River Basin in Mozambique is ongoing, following the signing of an MOU with the Ministry for Coordination of Environmental Affairs (MICOA) in Mozambique. The first phase of this demonstration project involves the preparation of a comprehensive environmental profile of the Incomati basin. MICOA has already constituted a Task Team to undertake this activity.

The WIO-LaB Project also provided support to participating countries for building capacity that is necessary for the sustainable protection and management of the coastal and marine environment in the WIO Region. In this regard, the project organized several training workshops on focusing on the development of leadership skills/capacity as well as training workshops building the capacity for the implementation of National Water and Sediment Quality Monitoring Programme.

Also, during the period under review, activities related to the development of an Eastern African Coastal and Marine Environment Clearinghouse Mechanism were initiated. A regional workshop that brought together all the relevant lead national institutions was successfully held in Nairobi. The lead national institutions agreed on the modalities of developing the CHM and fully committed to support this initiative. The project also commissioned a Regional Assessment Study to establish the needs of the participating countries with regard to the development of the CHM. The Final Report of the assessment study that has already been submitted to the WIO-LaB PMU is being used to design the CHM based on the identified needs of participating countries.

As detailed in this Annual Report, the progress with regard to the achievement of the immediate WIO-LaB project objectives is satisfactory (notwithstanding the somewhat limited capacity for project implementation in participating countries). It is expected that the anticipated outcomes of the project will be adequately achieved as earlier envisaged.





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#### Addressing Land Based Activities in the Western Indian Ocean

#### **Acronyms**

ACEP African Coelacanths Ecosystems Project

ADSEI Association pour le Développement Socio-économique d'Itsiama ANGAP Association Nationale pour la Gestion Des Aires Protégés, Madagascar

ASCLME Agulhas and Somali Current LMEs
CDA Coast Development Authority of Kenya

CHM Clearinghouse Mechanism COP Conference of Parties

CSIR Council for Scientific and Industrial Research, South Africa

DEWA Division of Early Warning and Assessment

DNE Direction Nationale de l'Environnement, des Forets et des Stratégies Agricoles,

Comores

EAF/RCU Eastern African Regional Coordination Center for the Nairobi Convention

EIA Environmental Impact Assessment EQO Environmental Quality Objective EQS Environmental Quality Standard GEF Global Environment Facility

GPA Global Programme of Action for the Protection of the Marine Environment from

Land-based Activities

GTA Grupo de Trabalho Ambiental IAEA International Atomic Energy Agency

IAEA-MESL International Atomic Energy Agency Marine Environmental Studies Laboratory

IAPS Integrated Algal Ponding System

ICARM Integrated Coastal Area and River Basin Management

IMS Institute of Marine Sciences, Tanzania

IOC-UNESCO Inter-governmental Oceanographic Commission of UNESCO

IW International Waters LBA Land-based Activity

LBS/A Land-based Sources and Activities

MENR Ministry of Environment and Natural Resources, Seychelles

MOE Ministry of Environment and National Development Unit, Mauritius

MOU Memorandum of Understanding

MWW Municipal Wastewater NC Nairobi Convention

NCS Nairobi Convention Secretariat

NEMA National Environmental Management Authority, Kenya NEMC National Environmental Management Council, Tanzania

NEPAD New Partnership for Africa's Development

NFP National Focal Point

NFPI National Focal Point Institution NPA National Programme of Action

ORI Oceanographic Research Institute, South Africa PADH Physical Alteration and Destruction of Habitats

PMU WIO-LaB Project Management Unit

PSC Project Steering Committee
RAC Regional Activity Center
SAP Strategic Action Plan
SGP Small Grants Programme

SWIOFP South-Western Indian Ocean Fisheries Project

TDA Transboundary Diagnostic Analysis

TOR Terms of References

UNDP United Nations Development Programme United Nations Environment Programme
United Nations Scientific and Cultural Organization **UNEP** 

**UNESCO** 

United Nations Office in Nairobi **UNON** 

**UNOPS** United Nations Office for Project Support

WIO Western Indian Ocean

Conservation of the Coastal and Marine Ecosystems in the Western Indian Ocean Western Indian Ocean Marine Sciences Association WIO-C

**WIOMSA** 





Addressing Land Based Activities in the Western Indian Ocean

#### 1. Background information

**Project title**: Addressing Land-based Activities in the Western Indian Ocean (WIO-LaB)

Project number (if applicable): GFL/QGL-2328- 2731- 4792 GF/XG-6030-04-11

**Responsible division(s)/unit(s) in UNEP**: UNEP/GEF WIO-LaB Project Management Unit; UNEP/Nairobi Convention Secretariat (NCS), UNEP/GPA

**Project starting date**: 6<sup>th</sup> December 2004

**Project completion date**: 31<sup>st</sup> December 2008

**Reporting period**: January-December 2006

Reference to UNEP sub-programme(s) and expected accomplishment(s): UNEP/GEF

International Waters - OP 10: Contaminant-based

#### 1.1 Overall objective(s) of the Project

The broad goal of the WIO-LaB Project is to address the pertinent degradation of the marine and coastal environment due to land-based activities in countries bordering the Western Indian Ocean (WIO). The Project seeks to contribute to the sustainable management of environmental resources within the context of the overall development of participating countries by addressing the land-based sources of pollution that have adverse impacts on rivers, estuaries and coastal waters, as well as the associated ecosystems that support socio-economic development and sustain livelihood systems in the region.

The Project represents a strong partnership between the WIO countries, the Norwegian Government, UNEP and GEF. The Project is designed to serve as a demonstration project of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA) and aims to achieve three specific objectives:

- Improve the information base and demonstrate guidelines and strategies for the reduction of stress to the ecosystem by improved water and sediment quality.
- Strengthen regional legal basis for preventing land-based sources of pollution, including implementation of GPA and,
- Develop regional capacity and strengthen institution for sustainable, less polluting development including the implementation of the Nairobi Convention.

#### 1.2 Financial details (budget)

Total Project Budget:

Cost to GEF:	Project:		4,186
	PDF-B	:	325
	Subtotal GEF	:	4,511
Co-financing:	UNEP (in kind):		375
C	Government (in cash & kind)	:	3,131
	Norway (in cash)	:	3,395
	Subtotal Co-financing	•	6,902

UNEP-GEF WI O-LaB Project

11,413,465

#### 2. Partners and leveraged resources

The WIO-LaB Project is being implemented by the United Nations Environment Programme (UNEP) and executed by the United Nations Office for Project Services (UNOPS) and the UNEP/Nairobi Convention Secretariat (NCS). The main financial partners are the GEF and the Government of Norway, contributing respectively US\$ 4,511,140 and US\$ 3,395,650. Countries participating in the Project are Kenya, Tanzania, Mozambique, South Africa, Seychelles, Comoros, Madagascar and Mauritius. Project activities in these participating countries are coordinated by the National Focal Point Institutions (NFPI) for the Nairobi Convention.

Apart from the numerous national institutions that are involved in the implementation of Project activities in participating countries, the Project has a number of regional and international partners that actively participate in the implementation of specific Project activities. These partners include in particular the New Partnership for Africa's Development - Coastal and Marine sub-Programme (NEPAD-COSMAR), the Western Indian Ocean Marine Science Association (WIOMSA), the World Wildlife Fund (WWF), the World Conservation Union (IUCN), the Agulhas and Somali Current Large Marine Ecosystems (ASCLMEs) Project, the South West Indian Ocean Fisheries Project (SWIOFP), the African Coelocanth Ecosystem Programme (ACEP), the Inter-governmental Commission of UNESCO (IOC-UNESCO) and the Marine Environment Studies Laboratory of the International Atomic Energy Agency (IAEA-MESL). All these partners participate in the implementation of various Project activities, as well participate in meetings and discussion forums related to the Project.

In addition, the Dutch NGO Aqua-4-All and the European Council for Vinyl Manufacturers have in the past year provided very valuable technical assistance to the development of a number of demonstration projects (estimated at a value of 40,000 US\$ in-kind and cash). Also, financial support to the value of US\$ 167,000 was received from the Government of Belgium for the development of a Clearinghouse Mechanism for the Nairobi Convention.

The Project has also benefited greatly from cooperation and support received from a number of UNEP Divisions and programmes, in particular the Global Programme of Action for the protection of the coastal and marine environment from land based activities (GPA), the UNEP Regional Seas Programme, the Division for Early Warning and Assessment (DEWA), the Division for GEF Coordination (DGEF), the Division of Environmental Policy Implementation (DEPI), the Division of Environmental Policy Development and Law (DEPDL), the Division of Environmental Conventions (DEC), the Regional Office for Africa (ROA), and last but not least the NCS.

Co-financing contributions made by the Project partners in the year 2006 (apart from the main contributions from the GEF and the Government of Norway) are presented in Annex 9. Contributions were computed following the principles approved by the WIO-LaB Steering Committee, as detailed in the Annual Report for the year 2005. The total co-financing contributions for 2006 amount to US\$ 741,460. Since the inception of the Project, the total in-kind co-financing contributions now amount to US\$ 979,950 in addition to an estimated US\$ 249,500 in cash. The participating countries have to date contributed an estimated value in co-financing amounting to US\$ 479,490 which is equivalent to about 34% of the original commitments made by governments at Project conception. Other Project partners have so far contributed an estimated US\$ 749,960, therewith by far exceeding the contribution of US\$ 375,000 committed at Project conception.

### 3. Project Status

#### 3.1 Information on the delivery of the Project activities

The following report provides an overview of the status of delivery of the various Project activities as per the amended Project Workplan as approved by the Project Steering Committee in its meeting of 7 March 2006 in Diani, Kenya...

	Output/Service	Status	Description of work undertaken during the reporting period	Description of problems encountered; Issues that need to be addressed; Decisions/Actions taken or to be taken
I			ing water and sediment quality	
Ia	Establish common methods for assessing water and sediment quality	Completed	<ul> <li>A meeting of the Regional Working Group on Water, Sediment and Biota Quality took place in Mauritius, in February 2006, to discuss and agree on the modalities of implementing the Regional Monitoring Programme and to agree on common methods and approaches for monitoring water and sediment quality. All participating national lead institutions have now been provided with a CD containing reference methods for assessment and monitoring of water, sediment and biota quality.</li> <li>The capacity assessment undertaken by IAEA-MESL was completed in Q1 2006. Based upon its results, three training programmes for analysts were defined and equipment requirements for participating laboratories were defined.</li> <li>In Q2 and Q3, two regional training workshops were successfully held in South Africa, at the Council for Scientific and Industrial Research (CSIR) in Durban, delivered by IAEA-MESL, and one in Tanzania, at the Institute for Marine Sciences (IMS) in Zanzibar, Tanzania, delivered by IMS. Analytical experts from all countries have now been trained on common approaches for sampling and analysis of nutrients, organic contaminants and heavy metals.</li> </ul>	One participant from the Comoros did not make it to the Nutrients Sampling and Analysis Training Workshop and there were some fears that this may limit the implementation of the Regional Monitoring Programme in the Comoros. Arrangements were later made for individual training of an expert from the Comoros at IMS in Zanzibar. All participating countries now have trained experts necessary for the successful implementation of the national water and sediment quality monitoring programmes.
Ib	Fill gaps in priority pollutants and their sources	Ongoing	7 out of the 8 participating National Lead Institutions (with the exception of Seychelles) have submitted their draft National Pollution Status Reports. The reports will be subjected to extensive review during the year 2007	The process for the preparation of the National monitoring programmes was initially constrained as a result of limited capacity in many of the National Lead Institutions. However, thanks to individual follow-up by

	Output/Service	Status	Description of work undertaken during the reporting period	Description of problems encountered; Issues that need to be addressed; Decisions/Actions taken or to be taken
			by both the WIO-LaB Project staff and the Regional Activity Center (RAC) based at CSIR, South Africa. A draft regional synthesis report has also been prepared by the CSIR. Final reports are expected to be ready by November 2007.  • All participating Lead National Institutions have prepared and submitted their National Water and Sediment Quality Monitoring Programmes. Programmes submitted by Kenya, Tanzania, Madagascar, Mauritius, and Seychelles have been approved and agreements between the Project and the institutions have been finalized. Monitoring activities are expected to commence by mid-January 2007 for most of countries and the final results are expected to be available by August 2007.  • Upon the advice of IAEA-MESL, standard water and sediment sampling equipment were purchased and delivered to all national lead institutions. Provisions for the purchase of other crucial equipment were built into the respective national monitoring programmes prepared by the lead national institutions.  • In all the participating countries, a good network of institutions involved in water and sediment quality monitoring and assessment has been established, and is formalized in national Working Groups. This to a large extent will ease the limitations faced by the countries in terms of capacity, whether related to human resources, laboratory supplies or equipment. In this respect, resources that are scattered in various national institutions/laboratories would be mobilized in order to successfully undertake the planned monitoring activities.	the WIO-LaB PMU most of the Lead National Institutions have now managed to finalize their national monitoring programmes.  • The assessment conducted by IAEA-MESL indicated that most of the relevant national institutions have limited capacity in terms of human resources, laboratory supplies and equipment. The Project has addressed these challenges by providing resources and training and by encouraging networking in participating countries so that scattered resources in various national institutions/laboratories could be mobilized.
Ic	Assess carrying capacity of coastal waters	Ongoing	The WIO-LaB PMU has prepared detailed the Terms of Reference for this activity. The assessment of ecotone carrying capacity will be undertaken concurrently with the development of Environmental Quality Objectives and Standards (EQO/Ss). The Council for Scientific and Industrial Research (CSIR) of South Africa is being sub-	There is very little work that has been undertaken in the WIO Region with regard to the determination of the carrying capacity of coastal waters and ecotones. In this respect, it is expected that the report that will be prepared by CSIR would be mainly based on studies undertaken elsewhere.

	Output/Service	Status	Description of work undertaken during the reporting period	Description of problems encountered; Issues that need to be addressed; Decisions/Actions taken or to be taken
			contracted to undertake this assignment, starting January 2007.	
Id	Determine and assess coastal hot spots of pollution	ongoing	<ul> <li>During the second meeting of the Regional Working Group on Water, Sediment and Biota Quality, held in Mauritius in February 2006, the list of hots spots identified through the African Process was reconfirmed. In view of the fact that Comoros and Madagascar were not party to the African Process, the WIO-LaB Project provided support to these two countries to initiate a process for identification of pollution hotspots in their countries; this process has now been completed.</li> <li>The analysis of hots spots closely linked to activity 1b: the regional monitoring programme and related national programmes prepared by the Lead Institutions focus on the agreed hot spots; also, the national Pollution Status Reports and Regional Synthesis report focus in particular on the hot spots.</li> </ul>	See comments on activity 1b.
Ie	Establish regional EQO/Ss for water and sediment quality	Ongoing	• The WIO-LaB PMU has prepared detailed Terms of Reference for the activity on the development of EQO/Ss <sup>1</sup> . The development of EQO/Ss is closely related to the assessment of ecotone carrying capacity (activity 1c). The Council for Scientific and Industrial Research (CSIR) of South Africa is being sub-contracted to undertake this assignment, starting January 2007.	Apart from South Africa and Mauritius, none of the Project countries has in place a system of EQO/Ss. However, similar work on the development of common EQO/Ss has been undertaken by CSIR in the Benguela Current region. The WIO-LaB Project will benefit from this experience through contracting CSIR for this assignment.
If	Develop compliance and long-term monitoring protocols and reporting	Ongoing	See activity IIIi as it concerns the development of a regional information management system for the Nairobi Convention.	See activity IIIi as it concerns the development of a regional database for the Nairobi Convention.
Ig	Implement demo-projects for major LBAs and pollutant sources	Ongoing	• The Project Steering Committee, during its second meeting in March 2006, prioritized 7 demonstration projects for further development and implementation, in addition to the 2 fast-track projects already approved in	The speed of development of the demonstration projects is constrained by limited capacity and experience of the project proponents, particularly with regard to the requirement to meet certain GEF Standards. In order to

Note that in regard to Environmental Quality Standards, we would rather refer to guidelines for the establishment of water and sediment quality standards, since a fully uniform set of standards for the region is, at least for now, probably beyond the scope of possibilities since at present most countries have no systems in place to incorporate such standards into national regulations.

	Output/Service	Status	Description of work undertaken during the reporting period	Description of problems encountered; Issues that need to be addressed; Decisions/Actions taken or to be taken
			<ul> <li>2005. All projects are in various stages of implementation.</li> <li>All projects successfully entered their first stage of implementation, which basically involves design, stakeholder consultations and feasibility studies. The fast-track demonstration project "Application of vetiver grass for the reduction of erosion and leachate from a landfill in the Msimbazi River Basin in Dar Es Salaam, Tanzania" and the project 'Towards sustainable mangrove management in Mozambique through reduction of anthropogenic pressure on the ecosystem' have meanwhile reached the full-scale implementation stage. Most other projects are close to also entering the full-scale stage.</li> <li>For a complete overview of the status of the various demonstration projects, please refer to annex 8.</li> </ul>	assist the project proponents to prepare acceptable project documents, the WIO-LaB PMU has prepared detailed guidelines for the preparation of the project document, budget, stakeholder participation plan and monitoring and evaluation plan. Furthermore, the PMU provided support to the project proponents to recruit national and/or international experts to assist in developing the projects. Also, several exchange visits of experts from within the region were arranged in order to benefit from the available expertise and to exchange lessons learnt between countries.
Ih	Develop guidelines and implement demo-projects on MWW management	Ongoing	<ul> <li>Of the 9 prioritized demonstration projects, 4 (Kenya, Pemba – Tanzania, Port Louis – Mauritius and South Africa) are fully or partly committed to addressing issues related to MWW management. Please refer to activity 1g and annex 8 for an update on the status of development of these projects.</li> <li>The WIO-LaB PMU completed the preparation of the detailed TOR for the national and regional level review of Global GPA MWW management guidelines. The review will be combined with an assessment of the status of MWW management in each of the Project countries (not originally planned). National MWW management experts have been recruited for all countries, apart from Mozambique. A regional expert was recruited in order to guide and coordinate the process, and to consolidate the national reviews in the form of a regional synthesis report. Detailed guidelines for the national reviews were prepared by the regional expert in consultation with the PMU.</li> </ul>	<ul> <li>Please refer to information presented for activity Ig for issues related to the demonstration projects.</li> <li>The process of recruitment of national experts to undertake this assignment was protracted and took time due to limited availability of expertise in some of the countries. The selection of an expert for Mozambique is currently still outstanding; in cooperation with the national focal point, the PMU is trying to find a solution for this case.</li> </ul>

	Output/Service	Status	Description of work undertaken during the reporting period	Description of problems encountered; Issues that need to be addressed; Decisions/Actions taken or to be taken
Ii	Select and implement PADH demo-projects	Ongoing	<ul> <li>Of the 9 demonstration projects, (River Gorges - Mauritius, Dar es Salaam - Tanzania, Mozambique, Comoros and Madagascar) are fully or partly committed to addressing issues related to PADH management. Please refer to activity 1g and annex 8 for an update on the status of development of these projects.</li> </ul>	Please refer to information presented for activity Ig.
Ij	Assessment of marine litter problems in the WIO region (not originally foreseen in the Project Document)		• In association with the UNEP/Regional Seas Programme, the Project commissioned the Western Indian Ocean Marine Science Association (WIOMSA) to undertake an assessment of the marine litter problem in the WIO region. National experts recruited for this activity has meanwhile submitted their reports and the regional expert has prepared a draft Regional Synthesis Report. The findings of this assessment, which was unforeseen at Project conception, will feed into the WIO-LaB TDA/SAP formulation process and will furthermore form the basis of possible interventions led by the UNEP/Regional Seas Programme.	A gap in information with regard to problems with regard to marine litter was recognized during the Nairobi Convention Focal Points Forum held in Dar es Salaam on 18 November 2005. Based on this recognition, a programme for assessment of marine litter related problems was developed and initiated in cooperation with the UNEP/Regional Seas programme.
II	Strengthen regional legal bas	sis for preven	ting land-based sources of pollution	
IIa	Review gaps in national legislation/regulatory frameworks	Ongoing	<ul> <li>All National Legal Experts have submitted draft and in 2 cases final versions of their national reports on the review of gaps in the policy, legal, regulatory and institutional frameworks. Before finalization, reports are reviewed and endorsed by National Legal and Technical Review (LTR) Task Forces established under the auspices of the Project. The National Task Forces are currently in the process of developing a national implementation plan defining priority actions to be undertaken at the national level in order to implement the key recommendations from the national reports. Feedback on this process will be discussed during the third meeting of the Regional LTR Task Force, and will among others form the basis for targeted support by the Project.</li> <li>The Regional LTR Task Force held its second regional meeting in Diani, Kenya where members of the Task</li> </ul>	<ul> <li>The initiation of the legal review activities in Tanzania was constrained due to staff changes within the office of the NFP. NEMC has now agreed to coordinate this activity in Tanzania; an MOU has already been signed in this regard.</li> <li>There has been considerable delay in the preparation of some of the national reports, notably in Mozambique, Comoros and Mauritius, largely due to failures to timely deliver on the part of the individual experts. This has in turn affected the timely preparation of the draft regional reports. A new legal expert has meanwhile been recruited for Mozambique. For other countries, continuous follow up is being given in order to avoid further delays.</li> </ul>

	Output/Service	Status	Description of work undertaken during the reporting period	Description of problems encountered; Issues that need to be addressed; Decisions/Actions taken or to be taken
			Force and the National Focal Points discussed in detail the two regional synthesis reports on the review of gaps in the policy, legal, regulatory and institutional frameworks that was prepared by the Regional Legal Expert.	
IIb	Review status of ratification of conventions	Ongoing	As for activity IIa.	As for actitity IIa.
Пс	Establish and implement effective regional EIA guidelines	Ongoing	<ul> <li>For the purpose of guiding this activity, the Project has established a Regional Environmental Impact Assessment (EIA) Task Force, consisting of representatives of EIA regulating institutions in the participating countries, as well as representatives of the Eastern African Association for Impact Assessment (EAAIA). During the inception meeting of the Task Force in July 2006 in Maputo, Mozambique, the EIA experts established and agreed on the modalities for (i) the preparation of a report on existing policies, regulatory and institutional frameworks related to EIA in participating countries (ii) the development of common Guidelines for EIA with regard to transboundary/cumulative impacts; and (iii) to review the clauses of the Nairobi Convention and its Protocols within this context.</li> <li>The Project recruited an International EIA Expert to support the Task Force in the development of the Regional EIA Guidelines. The International EIA Consultant has already submitted draft versions of the Regional EIA Guidelines as well as a draft report on existing policies, regulatory and institutional frameworks related to EIA in participating countries. The report and guidelines will be discussed further during the 2<sup>nd</sup> regional meeting of the EIA Task Force that is scheduled to be held in Zanzibar, Tanzania in January 2007.</li> </ul>	<ul> <li>Eventual implementation of the Regional EIA         Guidelines is of major concern. Close cooperation with         the EAAIA and WWF is therefore foreseen in 2007, in         view of the fact that these regional institutions have great         interest in promoting sound approaches on EIA within         the region.</li> <li>Within the same context, the process of domestication of         the guidelines will be on the agenda for the 2<sup>nd</sup> and 3<sup>rd</sup>         meeting of the Regional EIA Task Force. National EIA         Task Forces are being established for this purpose and in         some cases already had their first meeting.</li> </ul>
IId	Assist countries in developing NPAs for LBA/S	Ongoing	The National Environment Management Council (NEMC) of Tanzania is leading activities geared	The start-up of NPA development in target countries is taking longer period than expected. This was mainly

	Output/Service	Status	Description of work undertaken during the reporting period	Description of problems encountered; Issues that need to be addressed; Decisions/Actions taken or to be taken
			towards the finalization of the National Programme of Action (NPA) for the protection and management of the coastal and marine environment from LBA/S in Tanzania. An MOU was signed between UNEP and NEMC for this activity.  Other countries that are targeted for provision of support to the development of NPAs include Kenya, South Africa, Mauritius and Seychelles. A MOU for the preparation of an NPA for Kenya has already been signed and the implementation of activities has begun. It is intended that the NPA development will be closely linked to the development of an Integrated Coastal Zone Management (ICZM) Plan for Kenya, which is supported by the Government of Denmark.  Discussions are still ongoing between the Project and the South African Department of Environmental Affairs and Tourism (DEAT), the Seychelles Ministry of Environment and Natural Resources (MENR) and the Mauritius Ministry of Environment and National Development Unit (MOE), with regard to the development of NPAs within their respective national policy frameworks.	attributed to a lack of appreciation of what NPA entails. Also, the establishment of inter-ministerial committees has taken some time. Efforts have therefore been undertaken to educate the five target countries on what NPA entails, as well as to provide support for the establishment of inter-ministerial committees.  • Furthermore, most countries already have in place, or are in the process of development of more comprehensive environmental management plans and policies and/or ICZM plans. In order to remedy this limitation, mainstreaming of NPA process within such ongoing Environmental/ICZM frameworks is being pursued rather than promoting completely independent NPAs.
He	Develop and adopt a new LBA/S Protocol to the Nairobi Convention	Ongoing	<ul> <li>The preparation of a Protocol on Land-based Activities and Sources (LBS/A) for the Nairobi Convention is proceeding well. The first draft version of the LBS/A Protocol was reviewed by the Regional and National Legal and Technical Task Force during its second meeting held in Kenya in March 2006.</li> <li>The third draft LBA/S Protocol for Nairobi Convention was sent to the NFPIs for national level consultation and dialogue. A concept paper for this national review process was prepared by the Regional Legal Expert in cooperation with the PMU and submitted to the NFPIs. Madagascar, Mauritius and Comoros have already presented their reports on the outcomes of national dialogue on the draft Protocol. The third draft Protocol will be discussed during the third meeting of the</li> </ul>	<ul> <li>National level review of the LBA/S Protocol may be weak in some of the countries due to limited capacity. The Project provided financial support to the NFPIs in order to build up their capacities.</li> <li>There is a need to introduce the LBA/S Protocol to the highest decision making levels in participating countries in order to ensure adequate domestication of the same. It is anticipated that the NCS will undertake steps to bring the Protocol to the attention of the political level stakeholders in the project countries.</li> <li>Reunion, not being a project country, has so far not been included in the process of development of the Protocol. It is anticipated that the NCS will take steps to bring the Protocol to the attention of the NFPI in Reunion at the appropriate time and manner.</li> </ul>

	Output/Service	Status	Description of work undertaken during the reporting period	Description of problems encountered; Issues that need to be addressed; Decisions/Actions taken or to be taken
			Regional Task Force, before finalization and submission to the NCS.	
IIf	Promote and enhance ICARM principles	Ongoing	<ul> <li>Continuous coordination is taking place with the Incomati River Basin Tripartite Committee, facilitated by the Dutch Institute for Coastal Zone Management (RIKZ), one of the Project partners.</li> <li>The implementation of the Incomati Integrated Coastal Area and River Basin Management (ICARM) project commenced in July 2006. An MOU was signed between UNEP and MICOA for the preparation of an environmental profile of the Incomati Basin and the associated Coastal Zone. The Environmental Profile will set the stage for the development of an ICARM Strategy for the Incomati River.</li> <li>MICOA has already recruited a Team Leader for the Incomati ICARM project and the National Task Team is now in place. Furthermore, the PMU in consultation with MICOA is recruiting a remote-sensing expert to support MICOA in the preparation of the Incomati River basin environmental profile.</li> </ul>	<ul> <li>Capacity at MICOA to a certain extent limited the pace of implementation of this activity. A close link with the University of Mondelane was therefore established, and recruitment of an international exert was initiated to reinforce the ICARM project.</li> <li>The existing framework for cooperation between Swaziland, South Africa and Mozambique, through the Incomati Tripartite Committee, has been slow in yielding practical actions and results. For this reason, the focus of the project has been directed at strengthening mainly Mozambique, by supporting the development of its cases, and therewith become a more mature partner in the negotiation processes of the Tripartite Committee.</li> <li>In view of the need for basic data on main river basins other than the Incomati River, within the context of the development of the regional TDA/SAP preparation (activity (IIIh)), the Project is considering the development of profiles for other important river basins in the WIO Region. A proposition to this extent will be made to the next PSC.</li> </ul>
IIg	Establish a regional International Waters (IW) coordination mechanism	Ongoing	<ul> <li>Discussions have been held between the WIO-LaB Project and NEPAD COSMAR with regard to the coordination of the IW forum activities.</li> <li>WIO-LaB Project has continued discussions with the African Coelocanth Ecosystem Project (ACEP) with regard to the establishment of a regional trust fund for sustainable development, research and assessment activities in the WIO-region. Arrangements for the registration of the Regional Trust Fund are at advanced stage.</li> </ul>	• In view of delays in the commencement of the UNDP/GEF ASCLME and World Bank/GEF SWIOFP projects, no official IW Forum was organized in 2006. Instead, efforts were directed at establishing closer coordination with other key organization in the region. In this regard, the project co-facilitated the establishment of the Consortium for Conservation of the Coastal and Marine Ecosystems in the Western Indian Ocean (WIOC), which is intended to provide framework for cooperative actions between NGOs (e.g. IUCN, WWF, Cordio, WCS, EAWS) and inter-governmental organizations (e.g. NEPAD, IOC-UNESCO and the Indian Ocean Commission), under the umbrella of the Nairobi Convention.

	Output/Service	Status	Description of work undertaken during the reporting period	Description of problems encountered; Issues that need to be addressed; Decisions/Actions taken or to be taken
III	Develop regional capacity fo	r sustainable	less polluting development	
IIIa	Establish WIO-LaB PMU	Completed	The PMU is fully established and housed within the Secretariat of UNEP Nairobi Convention. The PMU is fully equipped and furnished.	
IIIb	Strengthen EAF/RCU and NCS as Regional Seas coordination unit for WIO region	Ongoing	<ul> <li>Strengthening of the EAF/RCU and NCS has been achieved through recruitment of WIO-LaB Project Technical Staff who are now implementing part of the Work plan of the Nairobi Convention.</li> <li>Creation and activation of a structure of national and regional Task Forces on specific topics (PADH, MWW, LTR, EIA and WSQ) under the auspices of the WIO-LaB Project has considerably increased the visibility of UNEP/Nairobi Convention and created a pool of experts in the region who can be consulted for implementation of various activities.</li> <li>Efforts to strengthen the NCS have already produced their spin-off. Following the official launch of the Forum for Academic and Research Institutions (FARI), operating under the umbrella of the Nairobi Convention, during the WIO-LaB organized WIO IW Forum in Mauritius in 2005, the Consortium for Conservation of the Coastal and Marine Ecosystems in the Western Indian Ocean (WIO-C) was established in Nairobi on 1 September 2006. The Consortium is intended to provide a framework for cooperative actions between NGOs (e.g. IUCN, WWF, Cordio, WCS, EAWS) and intergovernmental organizations (e.g. NEPAD, IOC-UNESCO and the Indian Ocean Commission), under the umbrella of the Nairobi Convention. These stakeholders therewith acknowledge the relevance of the Nairobi Convention as a framework for cooperation and interaction with Governments.</li> </ul>	Strategies of retaining the enhanced capacity of the NCS on long-term basis need to be put in place. In particular, strategies of retaining and maintaining the networks (including the Regional Task Forces) established under the auspices of WIO-LaB Project need to be put in place. This will require in particular further stimulation by the NCS towards the payment of country contributions to the Nairobi Convention (NC) trust fund. It is proposed that this issue is raised during the upcoming meeting of the Conference of Parties (COP) to the Convention.
IIIc	Determine and satisfy training needs for Land- Based Sources and Activities (LBS/A)	Ongoing	The Western Indian Ocean Marine Science Association (WIOMSA) undertook an assessment of Training Needs related to LBS/A management. The findings of the assessment were presented during the second meeting of	The assessment of training needs took considerably longer than envisaged due to slow progress at the level of the national experts recruited by WIOMSA. Experts from Mauritius and Mozambique were unable to submit

	Output/Service	Status	Description of work undertaken during the reporting period	Description of problems encountered; Issues that need to be addressed; Decisions/Actions taken or to be taken
			<ul> <li>the PSC in Kenya, in March 2006.</li> <li>Based on the Training Needs Assessment five training programmes were carried out: <ol> <li>An introductory training course on legal aspects related to LBS/A management for the Regional LTR Task Force, Kenya, 8 March 2006, presented by the regional Legal Expert recruited by the project;</li> <li>A training course on sampling and analysis of heavy metals in seawater sediments, Durban, by MESL-IAEA, South Africa, 6-12 May 2006;</li> <li>A training course on sampling and analysis of organic contaminants/pesticides in seawater sediments; Durban, by MESL-IAEA, South Africa,21 May – 2 June 2006;</li> <li>A training course on sampling and analysis of nutrients in seawater, Zanzibar, by IMS, Zanzibar, 5-9 June 2006;</li> <li>A training course on leadership in environmental management, Durban, by Ian Dean, Training Consultant, South Africa, 2-6 October 2006.</li> <li>In collaboration with UNEP/GPA, furthermore, an extensive country-level training programme on MWW management has been scheduled for the year 2007, cofinanced by the European Union and the GEF.</li> </ol> </li> </ul>	their national assessment reports to WIOMSA.
IIId	Develop educational programs on LBS/A	Ongoing	<ul> <li>The Western Indian Ocean Marine Science Association (WIOMSA) undertook an assessment of the LBS/A Educational Needs in the Eastern Africa region. The findings of the assessment were presented during the second meeting of the PSC held in Kenya, in March 2006. Further detailing, by WIOMSA, of education activities is currently ongoing.</li> <li>Discussions have been held with WWF-EAME and IUCN with regard to the development and implementation of specific educational programmes in the WIO Region. The WIOMSA report provides very</li> </ul>	<ul> <li>The assessment of training needs took considerably longer than envisaged due to slow progress at the level of the national experts recruited by WIOMSA. Experts from Mauritius and Mozambique were unable to submit their national assessment reports to WIOMSA.</li> <li>The process of influencing school curriculum shift in participating countries is a long-term venture and requires a level of involvement of relevant national government institutions that will need to be pursued using other initiatives and or regional processes. The Project will therefore link up with existing and planned</li> </ul>

	Output/Service	Status	Description of work undertaken during the reporting period	Description of problems encountered; Issues that need to be addressed; Decisions/Actions taken or to be taken
			good recommendations on the specific education programmes to be undertaken in participating countries.	initiatives in the region.
IIIe	Develop public-private partnerships	Ongoing	Public-private partnership strategies were integrated into the process of development of targeted demonstration projects. Most project proponents have established partnerships with the private sector in order to enhance the sustainability of their projects.	The issue of public-private sector partnerships in demonstration projects needs to be closely followed up. In particular, as part of the replication strategy established by the WIO-LaB PMU, strategies will be pursued by the PMU and local project proponents to involve the private sector in replicating some of the experiences gained from the demonstration projects.
IIIf	Identify and strengthen stakeholder participation in LBS issues	Ongoing	<ul> <li>The PMU has prepared a comprehensive and detailed Stakeholders Participation Plan that is guiding the project management in the engagement of various stakeholders in the implementation of the project activities.</li> <li>All demonstration project documents incorporate individual Stakeholders Involvement Plan that define the role of various stakeholders in the implementation of various components of demonstration projects.</li> <li>The NFPs in participating countries have established National Coordination Committees and National Task Forces and Working Groups (or related coordination mechanisms) on various thematic areas relevant to the WIO-LaB Project. MOUs have been signed between the Project and the NFPIs in Kenya, Tanzania, Mozambique, Madagascar and Comoros in order to facilitate the engagement of stakeholders in the implementation of project activities.</li> </ul>	<ul> <li>The process of developing a Stakeholder Participation Plan was slow in most of the participating countries, due to a lack of experience at the level of NFPs. Active follow-up was necessary in most of the countries.</li> <li>There was no provision in the project budget for financially supporting the NFPIs in participating countries. This to a large extent constrained the capacity of the NFPs to coordinate various WIO-LaB Project activities. However, following approval by the PSC, the Project is now able to provide funds to NFPIs in order to enable them to organize meetings and prepare reports to be submitted to the PMU (note: this support is not used to pay salaries of the NFPs but rather for directly related costs of transportation, meeting venues, etc. and in cases also for the engagement of meeting facilitators)</li> </ul>
IIIg	Implement Small-Grants Programme (SGP)	Ongoing	<ul> <li>A concept note for the implementation of the WIO-LaB Project Small Grants Programme (SGP) was approved by the PSC during the second meeting held Kenya, in March 2006.</li> <li>Discussions were held with the coordinators of the Global UNDP/GEF SGP in New York on the modalities of cooperation and arrangements for such cooperation were made.</li> </ul>	There was a delay in start-up of the SGP due to the need to establish modalities for cooperation with the Global UNDP/GEF SGP. The modalities for such cooperation are now in place.

	Output/Service	Status	Description of work undertaken during the reporting period	Description of problems encountered; Issues that need to be addressed; Decisions/Actions taken or to be taken
			The PMU has already dispatched required documents (i.e introductory letters, a sample call for proposals, criteria for the selection of projects and a template for the preparation of project proposals) to the NFPs and national UNDP/SGP Coordinators.	
IIIh	Update TDA and SAP	Ongoing	<ul> <li>The PMU has prepared a concept paper that specifies the modalities for undertaking the preparation of the TDA and SAP. The concept paper contains among others a work plan that states the timelines for delivery of TDA and SAP.</li> <li>The PMU has also prepared detailed TOR for the TDA/SAP Team, the TDA Scientific and Technical Advisory Committee (integrated largely within the existing FARI framework), as well as individual experts on the TDA Drafting Team (a Lead Consultant as well as experts on Water Quality/Pollution, Institutional and legal frameworks, and Ecosystems). A call for experts has been issued to a wide network of contact persons at various regional international, regional and national institutions.</li> <li>Discussions have also been held between the Project and the SWIOFP and ASCLME projects in regard to the coordinated implementation of the TDA/SAP process.</li> </ul>	The delay in start-up of the ASCLMEs and SWIOFP projects affected initiation of activities on TDA/SAP preparation.
IIIi	Develop East-African node of GPA Clearinghouse Mechanism	Ongoing	<ul> <li>A Regional Workshop in Nairobi in May 2006 brought together key national institutions responsible for data and information management with regard to the WIO marine and coastal environment. During the meeting, countries agreed on the modalities of establishing a WIO Marine and Coastal Environment Clearinghouse Mechanism (CHM) for the Nairobi Convention. They also agreed on the guiding principles for data and information exchange through the system.</li> <li>Following the regional workshops, the NFPIs have nominated national focal institutions to lead to the process of establishing 'national nodes' for the regional CHM. The national nodes will play a key role in</li> </ul>	<ul> <li>The designation of national focal institutions for the Regional Clearing House Mechanism took more time than planned due to national consultative and administrative processes.</li> <li>Further delays were attributed to the need to fully involve the concerned UNEP Divisions in the process of developing the CHM. Most of the issues have been solved and activities should proceed unhindered in 2007.</li> </ul>

Output/Service	Status	Description of work undertaken during the reporting	Description of problems encountered; Issues that need
Output/Service	Status	managing and coordinating data collection for the CHM at the national level.  • The Information Management Expert hired by the project submitted the final assessment report that identifies specific needs of institutions in participating countries and beyond, as a basis for the design of CHM. The Report also provides useful recommendations that will be used to sustain the system on a long-term basis.  • Discussions have been held between various UNEP Divisions (DEWA, DEPI-GPA, DCPI, Nairobi Convention) as well as with the IOC-UNESCO ODINAFRICA III Project with regard to cooperation in the development of the CHM. DEWA Staff linked to the WIO-LaB Project has been able to participate in several	to be addressed; Decisions/Actions taken or to be taken
		meetings of ODINAFRICA Project.	

#### 3.2 Report on status of achievements of project objectives and outputs

The following Table provides an overview of the status of achievement of the various project objectives and outputs as per the logical framework presented in the project Monitoring and Evaluation Plan.

Intervention logic	Objectively verifiable indicators	Status	Problems encountered, including action taken
DEVELOPMENT OBJECT	CTIVE:		
To contribute to the environmentally sustainable management and development of the WIO by reducing impacts of LBAs on rivers, estuaries and coastal and marine waters.	<ul> <li>Regional EQOs and EQSs defined and adopted by project countries by end of project.</li> <li>Regional strategies for MWW and PADH management developed and demonstrated by end of project.</li> <li>Revised TDA and SAP on LBAs developed an endorsed by countries by end of project.</li> <li>NPAs for five countries available by end of project.</li> <li>Protocol on LBAs to the Nairobi Convention developed and adopted by COP by end of 2007.</li> <li>Increased awareness and stakeholder involvement in LBA management by end of project.</li> </ul>	<ul> <li>Achievement of the development objective is on track:</li> <li>Baseline data for the development of EQOs and EQSs has largely been collected as part of the National Pollution Status Reports. CSIR is being sub-contracted to develop the regional EQO/EQSs.</li> <li>A review of the GPA Guidelines for MWW Management and key principles for PADH Management is ongoing. Regional and national experts have been engaged in an extensive assessment of existing MWW management approaches with a view of recommending appropriate strategies for the region. Nine demonstration projects, demonstration innovative, cost-effective and appropriate approaches to MWW and PADH management are in various stages of development and/or implementation.</li> <li>Data and information for the preparation of a TDA and SAP is being gathered as part of various project activities. A workplan for the TDA/SAP process has been developed and modalities defined. Actual start of this process is scheduled for Q1 2007.</li> <li>NPA development for Kenya and Tanzania is ongoing. Interest has also been expressed by Mauritius, Seychelles and South Africa to engage in an NPA process and specific arrangements are currently being discussed with concerned parties in those countries.</li> <li>The second draft Protocol on LBAs to the Nairobi Convention has been prepared and is currently being reviewed at the national level. National policy, legal and institutional reviews have been undertaken.</li> <li>A Regional Stakeholder Involvement Plan was prepared. National Coordination Committees and National and Regional Working Groups and Task Forces on five thematic areas have been established, ensuring the involvement of relevant governmental and non-governmental institutions. Furthermore, stakeholder involvement activities are integrated into the demonstration projects.</li> </ul>	The weakness of the NFPIs in the coordination and implementation of activities in participating countries limited the implementation of the project in the early stages. This problem has been partly resolved through the establishment of MOUs with NFPIs to strengthen their capacity to coordinate project activities at the national level, as well as through the organization of a leadership training course.

Intervention logic	Objectively verifiable indicators	Status			Problems encountered,
intervention rogic	Sofetively vermusic materials	Status			including action taken
PROJECT OBJECTIVES	:				
I.Improved information base and demonstrated guidelines and strategies for the reduction of stress to the ecosystem by improved water and sediment quality.	<ul> <li>Common regional monitoring methods agreed and pilot monitoring programme implemented by end of 2007.</li> <li>Regionally accessible data-base created by end of 2007.</li> <li>Regional EQO/EQS defined and approved by end of 2007.</li> <li>Long-term monitoring protocol developed by end of 2007.</li> <li>At least six demonstration projects successfully implemented by end of project.</li> <li>Regional annex on GPA guidelines for MWW developed by end of 2007.</li> </ul>	<ul> <li>Achievement of objective 1 is largely on track:</li> <li>Common regional water and sediment quality mand methods have been agreed upon. The capacinstitutions to undertake monitoring activities hat through three training workshops as well as the sampling equipment to lead national institutions monitoring programmes have been prepared and activities are being started up.</li> <li>The development of a Regional Clearinghouse Mairobi Convention is underway. An Information Strategy has been developed and agreed upon by institutions during a regional stakeholder works. National Focal Institutions and regional and interplace has been established.</li> <li>Baseline data for the development of EQO/Ss had Contracting of CSIR for the development of EQ</li> <li>Nine (9) demonstration projects focused on MW management are in various stages of development implementation.</li> <li>Regional and national wastewater experts are curglobal GPA wastewater Guidelines as well as the regard to MWW management approaches in the</li> </ul>	ity of participates been improved by supply of a supply participating hop. A network ernational partners been collected O/Ss is ongoin W and PADH and and/or arrently reviewing existing status.	ting ed  the t c of ers ed. g.	<ul> <li>Recruitment of regional and national experts is often protracted due to lengthy bureaucratic process. Also, response from the experts is not always fast enough and this has been delaying some activities.</li> <li>Progress on the development of the demonstration projects has been slower than expected due to limited capacity and experience at the national level.</li> </ul>
OUTPUTS:			Timeline	Status	-4-1
	essing water and sediment quality	f nollution for each country	Q4 2005	Comple	ress; Draft reports available
	Updated information on priority pollutants and major sources of pollution for each country Report on regional carrying capacity of ecotones Q1 2007 In prog				
	assessment of hotspots of pollution a	and sensitive areas in the region	Q1 2007 Q3 2007		ress: Draft reports available
<ul> <li>Common regional EQO/S</li> </ul>			Q3 2007	In prog	
■ Long-term monitoring and			Q3 2007	In prog	
<ul> <li>Demonstration projects or</li> </ul>			Q4 2008	In prog	
<ul> <li>Regional guidelines on be</li> </ul>	est practices for MWW Management a	and review of GPA Guidelines	Q1 2006	In prog	ress (delayed)

Intervention logic	Objectively verifiable indicators	Status			Problems encountered, including action taken		
II.Strengthened regional legal basis for preventing LB sources of pollution including through the implementation of the Global Plan of Action for the Protection of the Marine Environment from land-based activities	<ul> <li>Protocol on LBAs to the Nairobi Convention developed and endorsed by end of 2007.</li> <li>Regional guidelines for EIA developed by end of 2007.</li> <li>National Programmes of Action (NPA) developed for 4 countries by end of project.</li> <li>One demonstration project on ICARM implemented by end of project.</li> <li>Coordination framework with related GEF projects in the WIO functional during project life-time.</li> </ul>	<ul> <li>Achievement of objective 2 is largely on track:</li> <li>The second draft LBS/A Protocol for the NC ha is currently under review in participating countrexpected to be completed by February 2007. The presented to the fifth COP of the NC in August:</li> <li>A Regional EIA Task Force was established and process for the development of Regional EIA G. Transboundary/Cumulative Impacts. A Regional recruited and draft EIA Guidelines were prepare.</li> <li>The development of NPAs for Kenya and Tanza Interest has also been expressed by Mauritius, S. Africa to engage in an NPA process and specific currently being discussed with concerned particular The Incomati ICARM demonstration project is discussions with MICOA and the Incomati Trip. Committee. A MOU for the implementation of I have been finalized and MICOA has already est Task Team.</li> <li>The first WIO International Waters Forum was 31 August 2005. Coordination mechanisms were major GEF projects in the WIO region, includin ASCLMEs and the World Bank/GEF SWIOFP Ocean Fisheries) project.</li> </ul>	ies. The procese same will be 2007. It agreed on the uidelines for 1 EIA expert wed. It is underwater and is underwater and carrangements in those court ongoing followartite Technica Phase 1 of the ablished an IC theld in Mauritie agreed with a g UNDP/GEF	ss is  vas  ay. South s are ntries. ving al project CARM ius on other	<ul> <li>A concern is the limited understanding of the NPA process in the target countries. Consultations are being undertaken to explain the potential benefits of NPAs and also mainstream NPA into the well understood ICZM or other environmental planning and policy making initiatives in participating countries.</li> <li>Initiation of the ICARM Demonstration project in Mozambique was slow due to political processes at the level of the Tripartite Committee.</li> <li>International Waters Forum activities were limited due to the fact that SWIOFP and ASCLME projects are yet to enter into project implementation stage.</li> </ul>		
OUTPUTS:	<u> </u>	occan risheries) project.	Timeline	Status			
	orts on gaps in national legislation and	d ratification status	Q1 2006		ress (delayed): Drafts available.		
Regional guidelines for E		Q1 2007		ress: Draft available			
				In progr	ress		
Protocol on LBA for the Nairobi Convention Q4				In progr	progress: 2 <sup>nd</sup> Draft available		
■ Demonstration project on the application of ICARM principles Q1 2008					ress (start-up delayed)		
<ul><li>A Regional IW coordinati</li></ul>	on mechanism		Continuous	In progr	ress		

Intervention logic	Objectively verifiable indicators	Status	Problems encountered, including action taken
III.Improved regional capacity and strengthened institutions for sustainable, less polluting development, including implementation of the Nairobi Convention and its Protocols	<ul> <li>Strengthened Nairobi         Convention Secretariat and         Regional Coordination Unit         (RCU), both in terms of         implementation capacity and in         terms of political support.</li> <li>National training needs         identified and at least 8 training         courses on LBAs conducted by         end of project.</li> <li>Educational programmes         developed and implemented by         end of project.</li> <li>Stakeholder (including private         sector) awareness and         involvement activities         implemented in all project         countries by end of project.</li> <li>At least 16 local organizations         awarded grants from the SGP         by end of project.</li> <li>Updated TDA and SAP         developed and approved by end         of project.</li> <li>EA node for the GPA CHM         established and globally         accessible by end of 2006.</li> </ul>	<ul> <li>Achievement of objective 3 is largely on track:</li> <li>The WIO-LaB Project has considerably improved visibility of the NC. Several new stakeholder forums have been established as a spin-off of this visibility. The capacity for implementation of the NC workplan has been improved through the establishment of the PMU.</li> <li>WIOMSA was sub-contracted to undertake a training and educational needs assessment: A draft report is available and was presented to the PSC. Five regional training courses have so far been undertaken. Modalities for the implementation of educational activities are being developed.</li> <li>A Regional Stakeholder Involvement Plan was prepared. National Coordination Committees and National and Regional Working Groups and Task Forces on five thematic areas have been established, ensuring the involvement of relevant governmental and non-governmental institutions. Furthermore, stakeholder involvement activities are integrated into the demonstration projects.</li> <li>A concept paper on the Small Grants Programme (SGP) was approved by the PSC. Cooperation with the UNDP Global SGP was established and guidelines and modalities for implementation at the national level were developed.</li> <li>Data and information for the preparation of a TDA and SAP is being gathered as part of various project activities. A workplan for the TDA/SAP process has been developed and modalities defined. A TDA Task team is being established, for kick-off in Q1 2007.</li> <li>Development of the CHM is well underway. An Information Management Strategy was developed and a network of participating national, regional and international institutions was established.</li> <li>Detailed design of the system is currently being undertaken.</li> </ul>	<ul> <li>A key concern in terms of stakeholder awareness and involvement activities is the weakness of the NFPIs. For this reason, MOUs were developed with NFPIs to strengthen their capacity for coordination and implementation of stakeholder involvement activities at national level.</li> <li>Much effort is being put in designing a tailor-made project implementation structure, taking into consideration existing capacities and abilities to maintain the system on a long-term basis.</li> <li>Strengthening of the NFPIs requires a hand-in-hand approach with the Nairobi Convention secretariat, in particular where it involves the engagement of the higher levels in Government.</li> </ul>

Intervention logic	Objectively verifiable indicators	Status		Problems encountered, including action taken
<ul> <li>Training and Educational</li> <li>Training courses on LBA</li> <li>Educational material on L</li> <li>Educational programmes</li> <li>Small Grants Programme</li> <li>Updated Transboundary I</li> </ul>	irobi Convention (NC) Secretariat needs assessment s .BAs on LBAs (SGP) Diagnostic Analysis (TDA) and Strate	gic Action Plan (SAP)	Q4 2005 Comp Q4 2005 Comp Continuous In pro Continuous In pro Q4 2008 In pro Q4 2008 In pro Q4 2008 In pro	pleted pleted pleted pleted person
■ East African node for the	GPA CHM		Q1 2007 In pro	ogress
OUTCOMES:  A WIO region which is better equipped to ensure sustainable management of its marine and coastal environment by managing the impacts of LBAs, in terms of:  Commonly agreed and applied strategies and standards  A well-designed and applied regional legal framework  Adequate institutional capacity  An adequate level of stakeholder (including private sector) involvement and awareness	<ul> <li>SAP adopted and implemented in accordance with implementation plan</li> <li>Regional guidelines for MWW and PADH management applied</li> <li>EQOs and EQSs achieved in accordance with agreed targets</li> <li>Nairobi Convention and its protocols endorsed by all project countries</li> <li>Stakeholder involvement in management/reduction of LBA impacts on the coastal and marine environment</li> <li>Replication of demonstration projects (or specific lessons learnt) being undertaken</li> <li>Agreed monitoring protocol sustainably being implemented</li> </ul>	<ul> <li>Experiences so far show that there is a large interproject activities and anticipated outputs. Such it most profoundly through the wide stakeholder exproject and the momentum gained through the it activities on the ground, in particular the demon</li> <li>As to the adoption/endorsement of various project the SAP, various Regional Guidelines, EQO/Ss Protocol), interactions with stakeholders at various belief that such is still achievable and realistic.</li> <li>There are clear indications as to intentions to redemonstration projects in a number of cases (in of South Africa, Madagascar, Kenya, Mozambid indeed successful.</li> <li>The national monitoring programmes all incorporate the assurance of long-term sustainability.</li> <li>The extensive work on the review of the policy, institutional frameworks in the WIO region, as with regard to water and sediment pollution has with a good basis for the definition of strategies management of their marine and coastal environ will work with individual countries to further electronic strategies (whether or not through the developminglement priority actions.</li> </ul>	Interest manifests in aggement in the implementation of stration projects ect outputs (such as and the LBA/S pus levels makes policate some of the particular in the case que and Tanzania), if the project as assessments provided countries for more sustainable ament. The project aborate on such	project may only be considered to be catalytic in terms of building the capacity in participating countries.  Longer-term support in this regard should ideally be integrated into the Nairobi Convention workplan.

Intervention logic	Objectively verifiable indicators	Status	Problems encountered, including action taken
Actual reduction in stress from LBAs on the coastal and marine environment	<ul> <li>Reduction in levels of pollution of water and sediment quality</li> <li>Reduction in amount of pollutants discharged to the environment</li> <li>Reduction in physical alteration processes and destruction of habitats due to anthropogenic activities</li> </ul>	■ Although it is too early to report on the achievement of this outcome, it should be noted that change in the quality of the coastal and marine environment will only become more visible in the more distant future. This will mostly likely occur once countries adjust or develop their policies, legal and institutional frameworks and build up capacity to implement strategies effectively. The WIO-LaB Project is therefore focusing on the processes that will lead to longer-term improvements to regional and national management frameworks related to LBS/A.	■ The outcomes will be more visible in the future, most likely beyond the life of the WIO-LaB Project.

#### 4. Report on changes/delays in project delivery and details of remedial action

As can be concluded from information presented in sections 2.1 and 2.2, the implementation of the UNEP/GEF WIO-LaB Project is still largely on course, despite delays in the initiation of certain activities. The main bottleneck in the implementation of the project activities has been the limited capacity (both in terms of human and financial resources) of the NFPIs as well as tedious and lengthy bureaucratic processes that slow down activities.

The WIO-LaB PMU attempted to address the problem related to the limited capacity of the NFPIs, partly through the provision of financial support to those institutions. This support is two-tiered; (a) a program of support to the general functioning of the NFP office, which is financed from the Nairobi Convention Trust Fund; and (b) a program of support to national stakeholder coordination activities, including the functioning of national Task Forces and interministerial committees, financed from the WIO-LaB Project budget. In this regard, the Project has already entered into agreement with NFPIs in Kenya, Tanzania, Comoros, Madagascar, and Mozambique. Also, MOUs under the Nairobi Convention Trust Fund have meanwhile been established with all NFPIs, apart from South Africa.

There have been some changes in the planning of certain activities. Most importantly, the implementation of the TDA/SAP has been pushed forward by six months so that preliminary deliverables associated with this activity are ready by the August 2007 when NC COP 5 is scheduled to be held in South Africa. On the other hand, the implementation of the regional water and sediment quality monitoring programme has been pushed largely into 2007, due to the time required for the development of the national monitoring programmes by the participating national lead institutions.

Finally, in order to build up the capacity necessary for the development and implementation of the demonstration projects, the projects were each split up into a preparatory phase (during which detailed designs, stakeholder consultations and a feasibility assessment would take place), and the actual project implementation phase. Apart from two demonstration projects (the mangrove conservation project in Mozambique and the vetiver grass project in Tanzania), all projects are at present still in their first phase, although most are close to entering full-scale implementation.

Further details on specific problems encountered, and action taken to remediate such, have been presented in sections 2.1 and 2.2.





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# Annex 1 Regional meetings held during the reporting period

No	<b>Meeting Type</b>	Title	Venue	Dates	Convened by	Organized by	No. of Participants	Report issued as doc no	Lang.	Dated
1.	Expert Group Meeting	2 <sup>nd</sup> meeting of the Regional Working Group on Water, Sediment and Biota Quality Monitoring and Assessment	Port Louis Mauritius	8-10 Feb. 2006	WIO-LaB PMU	MOE	25	UNEP/GEF/WIO- LaB/WSQ.2/06.	English	27 Feb. 2006
2.	Intergovernmental Meeting	Meeting of National Focal Points	Mombasa Kenya	6 March 2006	WIO-LaB PMU	NEMA	16	N/A	English	28 March 2006
3.	Inter- governmental Meeting	Meeting of the WIO-LaB Project Steering Committee	Mombasa Kenya	7 March 2006	WIO-LaB PMU	NEMA	25	UNEP/GEF/WIO- LaB/PSC.2/2006	English	19 April 2006
4.	Expert Group Meeting	2 <sup>nd</sup> meeting of the Regional Legal and Technical Review Task Force	Mombasa Kenya	8-10 March 2006	WIO-LaB PMU	NEMA	26	UNEP/GEF/WIO- LaB/LTRTF.2	English	19 April 2006
5.	Expert Group Meeting	Regional Workshop on the Development of a Clearing House Mechanism and Information Sharing System for the Nairobi Convention	Nairobi, Kenya	9-11 May 2006	WIO-LaB PMU / UNEP/DEWA	WIO-LaB PMU / UNEP/DEWA	25	UNEP /GEF/ WIO- LaB/CHM.1/2006	English	31 May 2006
6.	Expert Group Meeting	First meeting of the Regional Task Force on Environmental Impact Assessment	Maputo, Mozambique	25-26 July 2006	WIO-LaB PMU	MICOA	19	UNEP/GEF/WIO- LaB/EIA.1/06	English	21 Aug. 2006
7.	Stakeholder Consultation Meeting	Partners' Consultative Forum for Conservation of Marine Ecosystems in the Western Indian Ocean	Nairobi, Kenya	31 Aug. – 1 Sept. 2006	UNEP/NCS	UNEP/NCS / WIO-LaB PMU	27	N/A	English	6 Oct. 2006
8.	Intergovernmental Meeting	Second Intergovernmental Review (IGR-2) meeting of the GPA	Beijing, China	16-20 Oct. 2006	UNEP/GPA	UNEP/GPA		Pending	English	

9.	Expert Group	Strengthening	Nairobi,	29 Oct.	GEF	GEF	25	Pending	English	
	Meeting	Transboundary Water	Kenya	- 2	IW:LEARN	IW:LEARN				
		Resources Management in	-	Nov.						
		Africa		2006						





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# Annex 2 Publications/Reports of meetings produced during the reporting period

No	Туре	Title	Author(s) / Editor(s)	Publisher	Publication Date
1.	Project	WIO-LaB Insight Volume 2 Issue 1	Peter Scheren, Johnson	UNON	January 2006
	Newsletter		Kitheka, Angelina Musera	Printshop	
2.	Progress	WIO-LaB Project Annual Report (2005)	Peter Scheren, Johnson	UNON	January 2006
	Report		Kitheka, Angelina Musera	Printshop	
3.	Meeting	Report of the Meeting of National Focal Points	Peter Scheren, Johnson	Not	March 2006
	report		Kitheka, Angelina Musera	published	
4.	Technical	An assessment of the National Capabilities for Marine Pollution Monitoring in the	Stephen De Mora (IAEA)	UNON	April 2006
	Report	Western Indian Ocean Region and Recommendations for Regional Capacity Building and Training Needs		Printshop	
5.	Meeting	Report of the Regional Workshop on the Development of the Eastern African Coastal	Johnson Kitheka and Peter	UNON	May 2006
	report	and Marine Environment Clearing House Mechanism	Scheren	Printshop	
6.	Meeting	Report of the 2 <sup>nd</sup> Meeting of the Regional Working Group on Water, Sediment and Biota	Johnson Kitheka and Peter	UNON	June 2006
	report	Quality Monitoring and Assessment	Scheren	Printshop	
7.	Meeting	Report of the Meeting of the 2 <sup>nd</sup> Meeting of the WIO-LaB Project Steering Committee	Johnson Kitheka and Peter	UNON	June 2006
	report		Scheren	Printshop	
8.	Meeting	Report of the 2 <sup>nd</sup> Meeting of the Regional Legal and Technical Review Task Force	Johnson Kitheka and Peter	UNON	June 2006
	report		Scheren	Printshop	
9.	Project	WIO-LaB Insight Volume 2 Issue 2	Peter Scheren, Johnson	UNON	July 2006
	Newsletter		Kitheka, Angelina Musera	Printshop	
10.	Progress	WIO-LaB half-yearly Progress Report	Peter Scheren, Johnson	Not	July 2006
	Report		Kitheka, Angelina Musera	published	
11.	Meeting	Report on the Inception Meeting of the Regional Task Force on Environmental Impact	Johnson Kitheka and Peter	UNON	September
	Report	Assessment (EIA)	Scheren	Printshop	2006
12.	Technical	Information Management Strategy for the Eastern African Coastal and Marine	Timothy Mwololo Waema	UNON	December
	Report	Environment Clearinghouse Mechanism		Printshop	2006
13.	Workshop	Regional Training Workshop on Leadership in Marine Environmental Management in	Ian Dean	Not	November
	Report	the Western Indian Ocean		published	2006





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# **Annex 3 Technical Information / Public Information Documents produced during the reporting period**

No	Description	Date
1.	Project Newsletter Volume 2 Issue 1	Jan 2006
2.	WIO-LaB Annual Report for 2005	Jan 2006
3.	Status Report on the WIO-LaB Demonstration Projects	Feb 2006
4.	Concept note on Implementation of the WIO-LaB Small-Grants Programme	Feb 2006
5.	WIO-LaB guidelines for the preparation of a detailed Project Document	April 2006
6.	WIO-LaB guidelines for the preparation of a Monitoring and Evaluation Plan	April 2006
7.	WIO-LaB guidelines for the preparation of a Stakeholder Involvement Plan	April 2006
8.	WIO-LaB template for preparation of a Project Budget and Cash-flow Analysis	April 2006
9.	WIO-LaB Lessons Learnt Note on Stakeholder Involvement	May 2006
10.	WIO-LaB Lessons Learnt Note on Demonstration Project Selection	May 2006
11.	WIO-LaB Lessons Learnt Note on Project Management Structure	May 2006
12.	WIO-LaB half-yearly Progress Report	June 2006
13.	Project newsletter Volume 2 Issue 2	July 2006
14.	Concept note on the Need for an LBA/S Protocol to the Nairobi Convention	July 2006
15.	Project information Brochure on Implementation of the GPA in the WIO Region	October 2006
16.	Updated WIO-LaB project Stakeholder Involvement Plan	Dec 2006
17.	Concept note on the WIO-LaB TDA/SAP Process and Workplan	Dec 2006
18.	Guidelines for National Level Review of the GPA Guidelines and Inventory of Status of MWW Management in the WIO Region	Dec 2006





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# Annex 4 Other Key Outputs/Activities during the reporting period

No	Description	Date
1.	Project Coordination Meetings, Nairobi, Kenya	Bi-weekly
2.	Participation of the Project Manager and Project Scientist in UNEP/DGEF weekly staff meetings, Nairobi, Kenya	Continuous
3.	Mission of the Project Manager to Seychelles for meetings with national stakeholders and the NC RCU	2-5 Feb 2006
4.	Short Training Programme on Law of the Seas and WIO LBS/A Issues for the Legal Experts Member of the Regional Legal and Technical Review Task Force	8 Feb 2006
5.	Mission of the Project Manager to Bangkok, Thailand for the Lessons learnt Learnt sharing meeting for the GEF Funded IW Projects	2-6 Feb3-5 May 2006
6.	Training Programme on Sampling and Analysis of Heavy Metals in Water, Sediment and Biota, Durban, South Africa	6-12 May 2006
7.	Final Project Document for the demonstration project "Application of Vetiver Grass for Erosion and Leachate Prevention at a Landfill in Msimbazi River Basin, Dar es Salaam"	June 2006
8.	Training Programme on Sampling and Analysis of Organic Contaminants in Water, Sediment and Biota, Durban, South Africa	22 May – 2 June 2006
9.	Training Programme on Sampling and Analysis of Nutrients in Sea Water, Zanzibar, Tanzania	5-9 June 2006
10.	Regional Training Workshop on Leadership in Marine Environmental Management in the Western Indian Ocean	2-6 October 2006
11.	Mission of the Project Officer/Environmental Scientist to Zanzibar, Tanzania to represent the UNEP/WIO-LaB Project in the official launch of the nutrients analysis and monitoring training workshop.	5-9 June 2006
12.	Mission of the Project Manager to Comoros and Madagascar for meetings with national stakeholders and to follow-up on the development of demonstration projects	12-19 June 2006
13.	Mission of the Project Manager to South Africa for meetings at the NFPI and to follow-up on the development of demonstration projects	20-21 June 2006
14.	Mission of the Project Officer/Environmental Scientist to Mozambique to follow-up on the development of demonstration project and implementation of WIO-LaB Project activities in Mozambique	21-25 June 2006
15.	Mission of the Project Manager and the Project Officer/Environmental Scientist to Mombasa, Kenya, to participate in the stakeholder meeting for the Shimo La Tewa demonstration project	6-10 September 2006
16.	First draft Protocol on Land-based Sources and Activities to the Nairobi Convention	January 2006
17.	Draft National Pollution Status Report – Mauritius	January 2006
18.	Draft National Report on Policy, Legal and Institutional Frameworks related to Land-based Sources and Activities – Mauritius	January 2006
19.	Draft National Report on Status of Ratification of International Conventions related to Land-based Sources and Activities – Mauritius	January 2006
20.	Draft Synthesis Report on Policy, Legal and Institutional Frameworks related to Land-based Sources and Activities in the WIO region	February 2006
21.	Draft Synthesis Report on Status of Ratification of International Conventions related to Land-based Sources and Activities	February 2006
22.	Draft National Pollution Status Report – Mozambique	February 2006
23.	Draft National Pollution Status Report – South Africa	February 2006
24.	Draft National Report on Policy, Legal and Institutional Frameworks related to Land-based Sources and Activities – Kenya	February 2006
25.	Draft National Report on Policy, Legal and Institutional Frameworks related to Land-based Sources and Activities – Mozambique	February 2006

No	Description	Date
26.	Draft National Report on Policy, Legal and Institutional Frameworks related to Land-based Sources and Activities – South Africa	February 2006
27.	Draft National Report on Policy, Legal and Institutional Frameworks related to Land-based Sources and Activities – Madagascar	February 2006
28.	Draft National Report on Status of Ratification of International Conventions related to Land-based Sources and Activities – Kenya	February 2006
29.	Draft National Report on Status of Ratification of International Conventions related to Land-based Sources and Activities – South Africa	February 2006
30.	Draft National Report on Status of Ratification of International Conventions related to Land-based Sources and Activities – Madagascar	February 2006
31.	Draft National Pollution Status Report – Tanzania	March 2006
32.	Draft Regional Programme Framework for the Regional Monitoring of Water, Sediment and Biota Quality	March 2006
33.	Draft National Report on Policy, Legal and Institutional Frameworks related to Land-based Sources and Activities – Seychelles	March 2006
34.	Draft National Report on Status of Ratification of International Conventions related to Land-based Sources and Activities – Seychelles	March 2006
35.	First Draft Report of the Regional Training Needs Assessment (by WIOMSA)	March 2006
36.	First Draft Report of the Regional Educational Needs Assessment (by WIOMSA)	March 2006
37.	Draft National Pollution Status Report – Kenya	May 2006
38.	Draft National Pollution Status Report – Comoros	May 2006
39.	Draft National Pollution Status Report – Madagascar	May 2006
40.	Draft National Report on Policy, Legal and Institutional Frameworks related to Land-based Sources and Activities – Comoros	May 2006
41.	Draft National Report on Status of Ratification of International Conventions related to Land-based Sources and Activities - Comoros	May 2006
42.	Second draft Protocol on Land-based Sources and Activities to the Nairobi Convention	June 2006
43.	Draft Regional Synthesis Report on the Status of Pollution in the WIO Region	September 2006
44.	Final project document "Towards sustainable mangrove management in Mozambique through reduction of anthropogenic pressure on the	November 2006
	ecosystem"	
45.	Second Draft Report of the Regional Training Needs Assessment (by WIOMSA)	December 2006
46.	Second Draft Report of the Regional Educational Needs Assessment (by WIOMSA)	December 2006





#### Addressing Land Based Activities in the Western Indian Ocean

# Annex 5 Sub-contracts issued during the reporting period

N.T	NT C 1 4 4	<b>C</b> 4	
No.	Name of sub-contractant	Country	Objective of the contract
1.	Direction Nationale de l'Environment	Comoros	National Focal Pont Support and Preparatory activities for the demonstration project "Gestion intégrée des
	(DNE)		plages à Itsamia, Mohéli, Union des Comoros"
2.	Kenya Marine and Fisheries Research	Kenya	Task Assignment No. 2: Implementation of a National Water and Sediment Quality Monitoring Programme
	Institute (KMFRI)		
3.	National Environmental Management	Kenya	Preparation of a National Programme of Action for Kenya & Coordination of related WIO-LaB Project
	Authority		Activities
4.	National Environmental Management	Kenya	Organisation of the second meeting of the WIO-LaB Project Steering Committee and second meeting of the
	Authority	-	Regional Legal and Technical Review Task Force, held in Diani (6-10 March 2006)
5.	Coast Development Authority (CDA)	Kenya	The execution of preparatory activities and the finalization of a consolidated project document for the proposed
	• • •		demonstration project "a wetland-lagoon system for wastewater management at Shimo la Tewa Prison,
			Mombasa, Kenya"
6.	Centre National de Recherches sur	Madagascar	Task Assignment No. 2: Implementation of a National Water and Sediment Quality Monitoring Programme
	l'Environnement (CNRE)	C	
7.	Association National pour la Gestion	Madagascar	National Focal Pont Support and Preparatory activities for the demonstration project "Développement de
	des Aires Protégés	C	l'écotourisme dans le Parc Marin du Grand Récif de Toliara"
8.	Ministry of Environment and Natural	Mauritius	Organisation of the Second Regional Meeting of the Water, Sediment and Biota Quality Assessment and
	Development Unit		Monitoring Working Group, Quatre Bornes, Mauritius, 8-10 February 2006
9.	Ministry of the Coordination of	Mozambique	Coordination of national WIO-LaB project activities and stakeholder consultations in Mozambique during the
	Environmental Affairs (MICOA)	1	period Oct 2006-Jun 2007
10.	Ministry of the Coordination of	Mozambique	Organization of the Inception meeting of the Regional Working Group on the development of Regional
	Environmental Affairs (MICOA)	1	Guidelines on the Environmental Impact Assessment (EIA) held in Maputo (25-26 July 2006)
11.	Grupo de Trabalho Ambiental (GTA)	Mozambique	Preparation of consolidated project document for the propose demonstration project entitled "sustainable
	,	1	mangrove management through reduction of anthropogenic pressure on the ecosystem in Mozambique"
12.	MICOA	Mozambique	Task Assignment No. 1: Development of a National Pollution Status Report
13.	Ministry of the Coordination of	Mozambique	Preparation of the Incomati basin environmental profile & project proposal for an Incomati integrated coastal
	Environmental Affairs (MICOA	1	area and river basin management project
14.	Council For Scientific & Industrial	South Africa	Organisation of Regional Training Workshop on Heavy Metals and Organic Contaminants in Water and
	Research (CSIR)		Sediments, Durban (6-12 May and 22 may – 2 June 2006 respectively)
15.	Council For Scientific & Industrial	South Africa	Shipment of standard Water and Sediment Samplers to National Lead Institutions
	Research (CSIR)		
16.	Oceanographic Research Institute	South Africa	Hosting of a Regional Training Workshop on Leadership in Marine Environmental Management in the Western

No.	Name of sub-contractant	Country	Objective of the contract				
	(ORI) aka SAAMBR		Indian Ocean, Durban, South Africa (2-6 October 2006)				
17.	National Environmental Management	Tanzania	Implementation of the demonstration project "Potential use of vetiver grass in leachate control and				
	Council (NEMC)		protection activities in Msimbazi Creek, Dar es Salaam"				
18.	Institute of Marine Sciences (IMS)	Tanzania	Organisation of a Regional Training Programme on Sampling and Analysis of Nutrients in Sea Water, Zanzibar				
			(5-9 June 2006)				
19.	National Environmental Management	Tanzania	Finalisation of the National Programme of Action on LBA/S				
	Council (NEMC)						





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# **Annex 6 Staffing details (personnel, experts, consultants)**

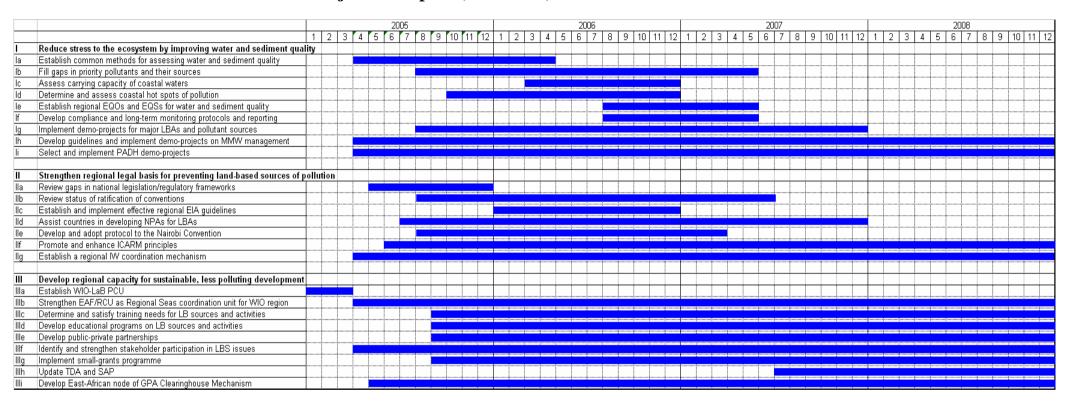
No.	Name of expert	Nationality	Functional title
1.	Peter Scheren	Netherlands	Project Manager
2.	Johnson U. Kitheka	Kenya	Project Officer/Environmental Scientist
3.	Angelina Musera	Kenya	Project Assistant/Secretary
4.	Sixtus Kayombo	Tanzania	Regional MWW Expert
5.	Philip John Pybus	South Africa	National MWW Expert
6.	Mohamed Maarouf	Comoros	National MWW Expert
7.	Jean Yves Michel Mong	Madagascar	National MWW Expert
8.	Melania Sangeu	Tanzania	National MWW Expert
9.	Alexis Radhay	Mauritius	National MWW Expert
10.	Marlon K. Montano	Seychelles	National MWW Expert
11.	Peter Tarr	South Africa	Regional EIA Expert
12.	Ian Dean	South Africa	Leadership Training Course Facilitator
13.	Abdurahim Abdu Kheir	Kenya	National MWW Expert
14.	Lieven Bydekerke	Belgium	GIS Expert
15.	Renato Mazivila	Mozambique	National Legal Expert
16.	Akunga Momanyi	Kenya	Regional Legal Expert
17.	Koki Mbulu	Kenya	National Legal Expert
18.	Hassan Ahamada	Comoros	National Legal Expert
19.	Jean Emile Andrianasolonjanahary	Madagascar	National Legal Expert
20.	Gaitree Jugessur-Manna	Mauritius	National Legal Expert
21.	Iris Carolus	Seychelles	National Legal Expert
22.	Jan Ignacy Glazewski	South Africa	National Legal Expert
23.	Timothy Mwololo Waema	Kenya	Regional Information Management Expert





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#### Annex 7 Amended WIO-LaB Project Workplan (2005-2008)







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# Annex 8 Brief description and status of prioritized demonstration projects

	Country	Title of the project / proponent	Short description of the project	Status of implementation
1.	Mauritius	A pilot project to determine the potential of native species to control soil erosion within the Black River Gorges National Park National Parks and Conservation Service	This pilot project will demonstrate the feasibility of using native plants to reduce land degradation and erosion on a ten hectare plot of land within the Black River Gorges National Park in Mauritius which has been cleared in the past to provide pasture for deers. Upgrading of access roads and the creation of storm drains in this area will also be carried out to reduce problems associated with surface runoff, while increasing access for visitors to the park. The area will be used as a demonstration area for sustainable land management using native vegetation species.	Preparatory stage: Detailed design, stakeholder consultations and feasibility study ongoing. Progress has been very slow.
		Waste Management at Port Louis Harbour, Mauritius  Port Emergency and Environment Unit - Mauritius Ports Authority	The proposed project aims to demonstrate an integrated approach to the management of solid waste in the Port Louis Harbour. The project includes activities for the prevention of influx of domestic waste entering the port area, the influx of oily and other wastes from on- and offshore activities, and the collection and disposal of such wastes in an environmentally safe manner. The project will also provide port based industries and stakeholders with facilities for their waste disposal. The project is based upon a strong partnership between government, the Port Authorities, port users and other stakeholders.	Preparatory stage: Detailed design, stakeholder consultations and feasibility study ongoing. Progress has been very slow due to issues related to the roles and responsibilities of the different project stakeholders.
2.	Kenya	A wetland-lagoon system for wastewater management at Shimo La Tewa Prison, Mombasa  Coast Development Authority (CDA)	The overall goal of the proposed project is to demonstrate a sustainable manner of pollution control of Mtwapa mangrove-fringed Creek by designing and constructing a coupled wetland-lagoon sewage treatment system at Shimo la Tewa Prison in Mombasa. The aim is to treat both grey water and sewage emanating from the prison premises by use of natural systems with minimum energy requirements (minimize the utilization of pumps and mortars). Opportunities for	Preparatory stage: Detailed design, stakeholder consultations and feasibility study ongoing. The project has been receiving Technical Assistance through the Dutch NGO "Aqua-4-All". Design is expected to be completed in March 2007.

	Country	Title of the project / proponent	Short description of the project	Status of implementation
			recycling of treated wastewater for irrigation and aquaculture will be investigated, and capacity will be build at the prison to adequately manage and maintain the system. The proposed natural system is easy to maintain and sustainability is assured through collaboration with the Municipal Council of Mombasa and the Prison operators.	
3.	South Africa	Demonstration of Integrated Algal Ponding System (IAPS) technology for the polishing and beneficiation of effluent from municipal sewage treatment facilities  Department of Environmental Science Rhodes University, Grahamstown	The project aims at demonstrating the benefits of the Integrated Algal Ponding System technology to coastal communities. Integrated Algal Ponding System technology has proven to be highly effective for the treatment of municipal wastewater and for polishing of treated effluent from conventional sewage treatment systems. Advantages of this technology are its low cost, ease of operation and the production of algal biomass (freshwater or marine) as a by-product, which is of commercial value as a fertilizer and a protein-rich animal feed.	Preparatory phase: Design and feasibility analysis completed but stakeholder consultations still ongoing. During stakeholder consultations, conflicts between stakeholders have come up and need to be resolved before the project can actually be started. The NFPI in South Africa is taking initiative to resolve the issues.
4.	Mozambique	Towards sustainable mangrove management in Mozambique through reduction of anthropogenic pressure on the ecosystem  Grupo de Trabalho Ambiental (GTA)	The proposed Project aims at contributing towards the enhancement of the productivity, stability as well as the functional integrity of mangrove ecosystems in Mozambique through knowledge sharing of the best land and resource use practices and implementation of demonstrative projects for reduction of destructive land based activities in a selected demonstration site (Lumbo) located in the vicinity of Ilha de Moçambique and Nacala Porto, in the province of Nampula. The focus of the project is on: improving understanding of the mangrove socio-economic, ecological and cultural values for increased awareness on mangrove value and on the need for their conservation; demonstrating the feasibility of reducing the pressure on the mangroves through creation of alternative sources of energy and building materials, and; demonstrating the feasibility of reducing pressure on the mangroves through creation of alternative livelihood activities other than direct exploitation of mangrove trees and extensive salt mining	Implementation phase: Project design completed and implementation activities initiated.

	Country	Title of the project / proponent	Short description of the project	Status of implementation
			and prawn culture.	
5.	Comoros	Projet d'aménagement, de protection et de gestion intégrée des plages a Itsamia Mohéli  Association pour le Développement Socio-économique d'Itsiama (ADSEI)	The project aims at demonstrating Integrated Coastal Zone Management practices at a selected demonstration site on Itsamia beach, in the area of Mohéli Marine Protected Area, on the island of Mohéli. The project aims, in this respect, at limiting pressures from land-based activities on the ecosystem through the construction of public sanitary facilities, replantation of coastal vegetation, and the establishment of a controlled landfill. The project, furthermore, intends to raise public awareness among the local population and visiting tourists, through the construction of an observatory for watching locally endemic sea turtles, the latter also serving as a source of revenue for the sustenance of the planned infrastructures.	Preparatory phase: Design, feasibility analysis and stakeholder consultations in final stage.
6.	Madagascar	Développement de l'écotourisme dans le Parc Marin du Grand Récif de Toliara  Parc-National Madagascar-Association Nationale pour la Gestion des Aires Protégées	The project focuses on the development of ecotourism activities in conjunction with the creation of a new Marine Protected Area (MPA) around the coral-reefs of Toliara by WWF. The principal objective of this ecotourism development is to support the socio-economic development of the region, and the livelihoods of local communities more in particular, as well as to ensure sustainable management of the MPA. The project foresees, in particular, the creation of an Information Center for the MPA, which will inform tourists and provide tourist services to them. Also, activities will be undertaken to involve the local population and stakeholder groups in the management of the park.	Preparatory phase: Design, feasibility analysis and stakeholder consultations in final stage. Start-up of implementation imminent.

	Country	Title of the project / proponent	Short description of the project	Status of implementation
7.	Tanzania	Potential use of Vetiver Grass in constructed wetland and erosion protection activities in Msimbazi Creek, Dar es Salaam	The project aims at protecting the marine and coastal environment of Dar es Salaam. The project will demonstrate the potential use of vetiver grass in erosion control and leachate treatment. The chosen site is a 400m stretch along the Msimbazi River at the old Vingunguti dumpsite. The aim is to up-scale or replicate	Implementation phase: Project design completed and implementation activities initiated.
		National Environment Management Council (NEMC)	the effort as an effective, affordable and sustainable measure against marine pollution. The following would be achieved at the end of the project: (i) Control of leachate flow into the river and improvement of the water quality; (ii) Control of riverbank erosion; (iii) Beautification of the dumpsite; (iv) awareness creation and (v) marketing of vetiver products.	
		Stormwater/Wastewater Drainage in Chake-Chake, Pemba, Zanzibar"  Department of Environment, Zanzibar	The project will involve the construction of waste- and stormwater collection and treatment system in the Msingini area in Chake Chake district, Pemba. The existing stormwater discharge system in this area is regularly causing floods and thus contamination of the fresh well located in the area. The project will demonstrate methods for separation of discharge of household wastewater (grey water) and storm water and proper channelling of these streams to prevent flooding, contamination and pollution of the marine environment. A wastewater treatment system based upon lagoons and/or a constructed wetland will be constructed to treat the wastewater stream before discharge into the ocean.	Preparatory stage: Design largely completed but feasibility analysis still ongoing. The project has been receiving Technical Assistance through the European Council of Vinyl Manufacturers through the Dutch NGO "Aqua-4-All". Progress has, however, been very slow. The project budget exceeds the WIO-LaB ceiling and co-financing is being sought from other sources.





Addressing Land Based Activities in the Western Indian Ocean

# Annex 9 Overview of cash and in-kind co-financing contributions from project partners

### Overview of co-financing contributions to the WIO-LaB Project

#### **Overview**

In-kind						Cash						Originally
Contributor	2005	2006	2007	2008	Total	2005	2006	2007	2008	Total	Grand total (US\$)	committed co- financing (US\$)
Countries	219,550	259,940	0	0	479,490	0	0	0	0	0	479,490	1,395,000
Partners	238,440	262,020	0	0	500,460	30,000	219,500	0	0	249,500	749,960	375,000
TOTAL	457,990	521,960	0	0	979,950	30,000	219,500	0	0	249,500	1,229,450	1,770,000

#### **Contributions per country**

In-kind								Cash	Grand total	Committed co-		
Country	2005	2006	2007	2008	Total	2005	2006	2007	2008	Total	(US\$)	financing (US\$)
Kenya	24,290	43,170			67,460					0	67,460	not indicated
Tanzania	48,030	38,570			86,600					0	86,600	322,000
Mozambique	22,960	29,790			52,750					0	52,750	235,000
South Africa	28,180	44,310			72,490					0	72,490	170,000
Madagascar	32,170	24,080			56,250					0	56,250	58,000
Mauritius	23,980	38,090			62,070					0	62,070	not indicated
Comoros	24,820	21,350			46,170					0	46,170	550,000
Seychelles	15,120	20,580			35,700					0	35,700	60,000
TOTAL	219,550	259,940	0	0	479,490	0	0	0	0	0	479,490	1,395,000

### **Contributions by other partners**

	ln-kind					Cash					Grand	Committed co-
Partner	2005	2006	2007	2008	Total	2005	2006	2007	2008	Total	total (US\$)	financing (US\$)
Belgium	0	0			0	0	167,000			167,000	167,000	
IAEA	25,000	10,000			35,000	0	0			0	35,000	
UNEP-NCS	80,000	80,000			160,000	20,000	20,000			40,000	200,000	375,000
UNEP-GPA	52,500	55,000			107,500	0	0			0	107,500	
UNEP-RSP	7,500	7,500			15,000	10,000	25,000			35,000	50,000	
UNEP-DEWA	11,000	16,000			27,000	0	0			0	27,000	
UNEP-ROA	15,000	5,000			20,000	0	0			0	20,000	
UNEP-DEPI	5,000	5,000			10,000	0	0			0	10,000	
UNEP-DEC	5,000	5,000			10,000	0	0			0	10,000	
Aqua-for-all	10,000	25,000			35,000	0	5,000			5,000	40,000	
ECVM	0	10,000			10,000	0	2,500			2,500	12,500	
CSIR	9,000	12,000			21,000	0	0			0	21,000	
IOC-UNESCO	2,000	7,450			9,450	0	0			0	9,450	
SWIOFP	1,420	980			2,400	0	0			0	2,400	
WIOMSA	5,420	6,540			11,960	0	0			0	11,960	
WWF	420	4,900			5,320	0	0			0	5,320	
Cordio	0	770			770	0	0			0	770	
EAWS	0	560			560	0	0			0	560	
ORI	420	560			980	0	0			0	980	
MACEMP	0	560			560	0	0			0	560	
WCS	0	560			560	0	0			0	560	
ASCLME	2,920	560			3,480	0	0			0	3,480	
IUCN	420	2,100			2,520	0	0			0	2,520	
NEPAD	5,420	5,980			11,400	0	0			0	11,400	
TOTAL	238,440	262,020	0	0	500,460	30,000	219,500	0	0	249,500	749,960	375,000