

Project Proposals on COASTAL EROSION

Supporting the Development and Implementation of Integrated Coastal Area Management (ICAM) in Sub-Saharan Africa

Project Number: COS 2

Project Title: Supporting the development and implementation of Integrated Coastal Area Management (ICAM) in Sub-Saharan Africa

Requesting countries: Seychelles, Mauritius, Ghana, Cote d'Ivoire, Nigeria, Kenya, Senegal and Gambia. Countries participating only by sharing information and experiences are Tanzania, South Africa and Mozambique.

Requesting Regional or National Organisation:

Seychelles - Ministry of Environment

Mauritius - Ministry Environment

Ghana - Ministry of the Environment

Cote d'Ivoire - Ministère de l'Enseignement Supérieur et de la Recherche Scientifique

Kenya - Ministry of Environment and Natural Resources

Senegal - Ministère de la Jeunesse, de l'Environnement et de l'Hygiène Publique

Nigeria - Federal Ministry of Environment

The Gambia - National Environment Agency (NEA)

Executing Agencies (proposed by national coordinators):

Seychelles - Ministry of Environment - ICZM Unit

Mauritius - Ministry of Environment - ICZM Unit

Ghana - Committee including Environmental Protection Agency, Ghana Ports and Harbours Authority, Hydrological Services Department, Ghana Tourist Development Company, Fisheries Department, Town and Country Planning Department

Cote d'Ivoire - Centre de Recherche Oceanologiques (CRO)

Kenya - Ministry of Environment and Natural Resources, National Environment Management Authority (NEMA)

Nigeria - Nigerian Institute of Oceanography, Federal Ministry of Environment, Niger Delta Development Corporation (NDDC)

Senegal - Direction de l'Environnement et des Etablissements Classés

The Gambia - National Environment Agency, Coastal and Marine Environment Working Group (multi-sectoral body)

Required national partners:

Seychelles - Ministry of Land Use and Habitat

Mauritius - Beach Authority, Ministry of Local Government, Ministry of Economy and Industry, AHRIM

Ghana - District Assemblies of Coastal Districts, Ghana Shippers Council, Ghana Hoteliers Association, Museum and Monuments Board

Cote d'Ivoire - Port Autonome d'Abidjan, Centre Ivoirien Anti Pollution (CIAPOL), Université de Cocody

Kenya - Forestry Department, Kenya Wildlife Service, Coastal Development Authority, Kenya Marine and Fisheries Research Institute.

Senegal - Département de Géologie et LPA de l'Université Cheikh Anta Diop, Equipe Vulnérabilité des zones côtières, Direction des Phares et Balises (PAD)

Nigeria - Nigerian Institution of Oceanography, Oil Producing Trade Sector (OPTS), NDDC

The Gambia - Department of State for Finance & Economic Affairs, Chamber of Commerce

Priority Issue addressed: GIWA loss and modification of Ecosystems and Habitat, shoreline change, overexploitation of resources.

Regional scope: Indian Ocean SIDS (Seychelles, Mauritius), Kenya, Cote d'Ivoire, Senegal, Nigeria, Gambia, Togo, Benin, Cameroon could join (commonality of issues and transboundary).

Project location:

Seychelles (site: Anse Volbert); Mauritius, Ghana (site: Ada/Anyanui Volta Delta Estuary Mangrove Complex (AVDEAMC)), Cote d'Ivoire (site: Grand Bassam), Kenya, Senegal (site : Djiffere), Nigeria (all coastline), Gambia ; Kenya (Ngomeni)

Project duration: First phase: five years

Working group of the African Process: Coastal erosion and possibly all other groups but particularly the Key Habitats Working Group.

SUMMARY

Coastal zones are the economic epicentre for many of Sub-Saharan African (SSA) countries, and provide a livelihoods base for tens of thousands of people in the region. However, due to human population pressures, irrational decision-making, sectoral approaches to coastal management, the coastal environment is degraded, threatening the livelihoods of coastal communities. Overexploitation, loss of key habitats, pollution, coastal erosion are all key issues identified by countries across the region. A more holistic approach to coastal management is needed to contribute to tackling these issues, especially coastal erosion, one of the most critical problems in Western Africa. Although most countries in the region are developing or have developed framework ICAM plans, few have managed to further implement these plans.

The aim of this project is to support and facilitate the development and/or implementation of Integrated Coastal Area Management (ICAM) in Sub-Saharan Africa at the national level and in selected demonstration sites where erosion has been identified as a main issue. To further the implementation and uptake of ICAM at the national level, the project will assess the constraints to ICAM implementation and/or development. The project will also emphasise the sharing of past experiences, lessons learned from previous projects and studies through regional networks and initiatives as *“although a number of initiatives in ICM have been successfully implemented in Africa, **there seems to be lack of a learning process, or of effective mechanisms by which successes and failures can be shared.** This is evident at the national level, and much more so at sub-regional and Africa-wide levels”* and *“ICM initiatives do not necessarily lead to better management of African coasts. What is needed is to develop, on the basis of project experience, proper regulatory and institutional measures at the national level to initiate a process of sustainable coastal management for Africa”*. (Finland/UNEP/PAP report, 1998)¹.

Countries will choose to participate to components of the project on a needs and capacity basis. The implementation of ICAM will also be started in selected demonstration sites where erosion has been identified as a main issue.

Activities will include: a series of workshops to identify the main problems and constraints to the implementation of ICAM, sharing and analysing lessons learned and assessments from previous studies and projects; contribute to the design of implementation strategies in partnership with national stakeholders; promote intra-regional exchanges of expertise; disseminate information; facilitate capacity building activities in conjunction with appropriate regional institutions; contribute to the establishment of effective stakeholders involvement mechanisms and of strategies for increased public awareness; contribute to the definition of sustainable financing strategies. Activities will be carried out at the national level and facilitated and coordinated by a Sub-Regional Coordinating Unit.

Defining and implementing ICAM strategies will ensure a more holistic approach to the management of coastal activities at the national and regional level and thus contribute to reducing anthropogenic driven coastal erosion. It will also contribute to the sustainable use of coastal and marine resources. The implementation of ICAM plans will benefit coastal user groups and management bodies and mitigate the negative impacts on the socio-economic aspects.

ICAM has been identified as a priority at the regional level in the Jakarta Mandate of the Convention on Biodiversity, in the Abidjan and Nairobi Conventions - Arusha Resolution on ICZM in East Africa including the Island States (1993) and the further Seychelles Conference Statement (October 96) - as well as at the national level in Seychelles, Mauritius, Cote d'Ivoire, Senegal, Nigeria, Gambia and Ghana.

¹ Government of Finland/UNEP/PAP. Assessment of Integrated Coastal Management in Africa, 1998.

3. Costs and financing (Million US \$) (Tentative)²

International & bilateral sources:	10.236
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Governments in cash & kind:

Subtotal Co-financing: 1.66

Total Project Cost: 11.896

4. Government Endorsement

Seychelles - Mr. Lousteau-Lalane, Principal Secretary, Ministry of Environment

Mauritius - Ministry of Environment

Ghana - Ministry of Environment and Science

Cote d'Ivoire - Ministère de l'Environnement et du Cadre de Vie

Kenya - Ministry of Environment and Natural Resources

Senegal - Ministère de la Jeunesse, de l'Environnement et de l'Hygiène publique

Nigeria - Endorsed

The Gambia -

5. Government Focal Points

Seychelles - Mr Rolph Payet, Director-General, Policy Planning, Ministry of Environment

Mauritius - ICZM Unit, Department of Environment

Ghana - Environmental Protection Agency

Cote d'Ivoire - Environnement Department, CRO-

Kenya - – Ali Mohamed, Coordinator, Coastal and Marine Programmes

Senegal - Mme Fatimata Dia-Toure, Direction de l'Environnement et des Etablissements Classés, Ministère de la Jeunesse, de l'Environnement et des Etablissements Classés

Nigeria - Mrs Dublin-Green, NIOMR, Federal Ministry of Environment

The Gambia -

6. African Process Working Group Focal Points

Coastal erosion group: Dr. Isabelle Niang-Diop, Dr Alfonse Dubi and Dr Delphine Malleret-King

² This budget is preliminary and has not undergone a full consultation process with the respective countries. Therefore, it does not indicate the actual financial commitment that would be provided by participating countries once the project proposal and its components are finalised.

PROJECT DESCRIPTION

1. Background and justification

A large percentage of infrastructure, economic activities and human settlements are located on the coastal zones of SSA. Coastal resources provide food and livelihoods for coastal communities, which can represent more than half of national populations as in Seychelles or Senegal. However, in the last decades, increased population pressure, urban development and poverty have contributed to the destruction of coastal habitats, to resource overexploitation, to extreme pollution and increased erosion rates. Through irrational and sectoral decision-making processes, the use of coastal resources has been unsustainable thereby threatening livelihood opportunities for coastal populations. Habitat destruction and loss of key species has contributed to loss of tourism opportunities. Habitat degradation and irrational land use development has reduced the protection of the coasts thus increasing retreat rates which threaten coastal settlements, cultural heritage and tourism opportunities. Similarly, pollution caused by inadequate waste disposal and polluted effluents impacts on human health and contaminates or contributes to the depletion of food sources such as in the Korle lagoon in Ghana. Depletion of poorly or unmanaged fisheries resources affect the livelihood and food security of coastal communities, and even more so as fishing is often seen an activity of last resort.

Population pressure, poverty, insufficient education and insufficient awareness are at the root of most coastal issues. The lack of coordination of planning mechanisms, contradictory legislations, the lack of communication between government departments, have also been identified as a major constraints to the sustainable development and use of the coastal environment by country experts in the first phase of the African Process. Sectoral and unwise management has particularly contributed to increased coastal erosion. This project aims at addressing this issue and contributing to the implementation of a more holistic approach to coastal management. To increase the integration of coastal area management in a sustainable way, coordination mechanisms, and legislative tools need to be improved, legal, technical and institutional capacity need to be strengthened, stakeholder involvement and public awareness need to be increased, and sustainable financing mechanisms need to be defined.

The proposed project is part of a threefold strategy to improve erosion control in the region. This strategy proposes to address the erosion issues through three components:

- An erosion control component (detailed in the COS1 project: Coastal erosion control) which aims at assessing and implementing soft or hard measures to reduce or mitigate erosion,
- A management component (this proposal) without which erosion management cannot be sustainable or effective (for erosion prevention to be improved, a more holistic approach to coastal zone management is needed), and
- A last component which aims at taking account of future trends in coastal erosion, particularly at increasing knowledge and improving prevention of the impacts of future changes triggered by sea level rise and global climate change (details in COS3: Impacts of climate change (included sea-level rise) on the coastal zones of sub-Saharan Africa).

As well as addressing coastal erosion issues, ICAM implementation will also result in addressing and tackling issues associated with pollution, habitat degradation and tourism development. This project has to be seen as the first phase towards ICAM implementation in the region.

1.1. The need to improve and implement ICAM has been recognised at the national and regional levels

Although coastal activities all impact and are impacted on by each other, decisions are mostly taken in a sectoral way, disregarding downstream impacts (e.g. irrigation schemes affecting stream flows and sediment budgets, causing accretion, erosion and beach depletion) and interactions between activities. Poor decision making about infrastructure location, inappropriate mitigation measures, and resource extraction have been

identified by the World Bank (1995)³ as causes for high rates of erosion. The lack of vertical and horizontal integration of decision-making and coastal management has contributed to the unsustainable use of coastal resources, increased erosion rates and has threatened the livelihoods of thousands of coastal communities. In order to manage coastal zone resources and erosion more effectively, a more comprehensive approach to the management and development of coastal activities is needed. This need has been identified as a priority particularly by Mauritius, Seychelles, Cote d'Ivoire and Ghana in the first phase of the African Process.

In response to the increasing pressures and threats on the coastal environment, the importance of taking an integrated approach to coastal area management at the national, sub-regional, regional and global levels was underlined at United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro, 1992 - Chapter 17 of Agenda 21.

Since then, Integrated Coastal Area Management (ICAM) has been advocated at the regional and sub-regional levels in SSA and steps towards developing ICAM strategies have been taken.

The Maputo and the Cape Town Declarations of 1998 emphasised the need for ICAM at the sub-regional levels. Furthermore, one of the principal actions of the Jakarta Mandate of the Convention on Biodiversity is to institute ICAM, including community based coastal resource management. Finally, both the Nairobi and Abidjan Conventions, in their revival efforts, are taking actions to increase the coordination of monitoring and management activities in the coastal zones. Erosion has also been identified as a priority at the regional and sub-regional levels. At the second meeting of the COP of the Nairobi Convention in 1999 themes of activities to be carried out included the monitoring of erosion as well as management related actions addressing erosion, which was already identified as a priority in the Arusha Resolution (1993) and Seychelles Statement (1996). Finally, at the third COP of the Nairobi Convention, in Maputo (2001), monitoring of shoreline changes and erosion management were stated as being priorities and management as well as mitigation of coastal erosion is part of the Nairobi Convention biannual programme 2002-2003. Similar priorities were identified in the Abidjan Convention biennale work plan adopted during its 5th COP.

Several projects and programmes are or have been promoting ICAM implementation in the region. The World Bank in its framework for integrated coastal zone management (1995), promotes the development of a multiple use and system oriented mode of management for the coastal zones in order to "*optimise the net benefit flows from coastal resources to individuals and society by reducing user conflicts, mitigating adverse development impacts and enhancing the productivity of coastal ecosystems.*" The main objective of the Regional Programme for the Environment of the Indian Ocean Commission (PRE-COI) of the E.U, implemented in the Indian Ocean SIDS (1995-2000), was to support national programmes and policies for ICAM. The PRE-COI also contributed to the development of pilot projects. At the same time, SEACAM, created in 1997, was to assist the region to implement and coordinate coastal management activities through building capacity in the Eastern African region. SEACAM has already organised numerous training courses for coastal managers, NGOs and initiated reflections on the sustainable financing of coastal management programmes.

Compared to East and Southern Africa where there is a "*high concentration of integration of coastal management activities... Central and West Africa is the sub-region with few initiatives. Experience is recent, and the number of relevant initiatives is quite limited in spite of a large number of countries in the area.*" (Finland/UNEP/PAP, 1998). Although the Gulf of Guinea LME (GOG-LME) programme has recognised, at the sub-regional level, ICAM planning as a focal area, activities were identified to enable the development of ICAM but mainly oriented towards pollution control. This tendency to focus on a limited number of issues was one of the points raised by the Finland/UNEP/PAP report: "*The majority of ICM initiatives in the sub-region are addressing the issue of institutional development and capacity building, normally an early stage in instituting ICM as a process. Many of the projects which were area specific were addressing a limited number of issues (i.e. pollution, wetlands, lagoons etc.) lacking a broader perspective of ICM.*"

³ World Bank, Africa: A Framework for Integrated Coastal Zone Management, Environmentally Sustainable Development Division and Land, Water and Habitats Division, Africa Region, 1995.

Although there has been progress, efforts made, and a large number of initiatives in the SSA there is still the need to develop implementation activities. This is a finding of the Finland/UNEP/PAP report of 1998 which states that: "*Africa, at least at the institutional level, is far beyond the stage of awareness of the need for ICM*" but "*in spite of the large number of initiatives there is still need to develop further activities... particularly in the area of implementation, and especially beyond the very small local scale.*" Furthermore "*it is evident from the assessment that there is growing activity in ICM in Africa but to lead to sustainable development it is critical to maintain partnership and support from bilateral and multilateral donors and international agencies*".

The degree of development and implementation of ICAM in the SSA vary from country to country. For example, national ICAM policies and strategies have been developed in Seychelles, Mauritius, Mozambique and Tanzania but other countries such as Kenya have developed plans only at a site level. Other countries do not have a plan such as Senegal or their plan is incomplete such as in Nigeria or in Cote d'Ivoire (see Annex I).

Implementing mechanisms and tools are also at different stages in development. Countries such as Tanzania, Kenya, Mauritius and Gambia have or are in the process of developing coordinating management bodies, but in some countries such as in Senegal, these bodies still need to be developed in order to achieve a comprehensive approach to coastal management and therefore to erosion protection. (see Annex I)

At the site level, some stakeholder involvement has been achieved (e.g. in Tanzania with IUCN and USAID support) and public awareness on coastal issues increased (e.g. in Kenya through a WWF initiative in Kiunga). In Kenya, a process is being developed to involve stakeholders in coastal management at the national level through a Kenya Marine Forum - with the support of IUCN/USAID - however most countries in SSA have no, or very little stakeholders' involvement mechanisms or public awareness strategies implemented at the national level (Annex I).

The lack of regulatory tools and expertise have prevented enforcement of ICAM plans in Mauritius and Seychelles, which is a common scenario across the region, and technical, legal or institutional constraints were identified as the main hindrances to the development of ICAM plans in Western Africa by the GOG-LME sub-regional programme. Furthermore, the ICM assessment in Africa shows that "*The African experience demonstrates that success depends, to a great extent, on pragmatic approach and careful plan/programme/project development on recognizing inter-sectoral and inter-administrative level linkages properly, taking into consideration environmental concerns in development planning and coastal resource management*" (Government of Finland/UNEP/PAP, 1998).

1.2. Coastal erosion, a critical issue which can not be dealt without ICAM implementation

Improving ICAM will contribute to increasing communication and coordination between policies at the national levels and contribute to reducing overexploitation of resources, pollution but also to improving coastal erosion protection both from human and natural causes. Although coastal erosion is only one of the issues that ICAM will positively impact on, it is emphasised in this project, which is part of an integrated package (COS2 is part a threefold strategy with COS1 and COS3, see section 1), aiming at improving erosion control, one of the most critical issues in West Africa and in the Indian Ocean Island States.

Coastal erosion is a cause and an impact of habitat degradation, which in turn affects the productivity of the ecosystem and the livelihoods of the communities depending on coastal resources through fishing, tourism, farming etc. As recognised by the Abidjan Convention, the GOG-LME programme and the World Bank (1995), erosion is one of the priority coastal issues in West Africa. Retreat rates are very high in the sub-region; they vary between 1 to 3 meters and can be extreme in sensitive areas. 4 to 5 m erosion rates are observed in The Gambia (Bijilo and Kololi beaches) and rates as high as 20-30 meters have been recorded in Nigeria⁴ (Niger Delta, Lagos and Escravos Harbours), in Ghana (Keta) and in Senegal (Djiffere) affecting

⁴ The Victoria beach is the fastest eroding beach in Nigeria with average erosion rates of 20-30m annually. Between 1900 and 1959, Victoria beach retreated by over 1km near the eastern mole, decreasing to about 400m some 3km eastwards in the area of the Kuramo waters. However, the Lighthouse beach near the western breakwater accreted by over 500m within the same period. Annual erosion rates of 25 - 30m had been reported between 1981 and 1985. This high rate of erosion has been linked to the construction of the moles built to stop the silting up of the entrance to Lagos harbor. Erosion rates range between 18-24m annually at Ugborodo/Escravos

coastal infrastructure and development. Coastal erosion has thus been recognised as a critical issue at the national level by Cote d'Ivoire, Gambia, Ghana, Nigeria and Senegal in the first phase of the African process (see country reports).

Although coastal erosion is not as critical at the sub-regional level in Eastern Africa as in Western Africa, the Nairobi Convention considers the management and monitoring of shoreline changes as a one of the priority areas. High average retreat rates of 1 m per year are observed in Mauritius and Seychelles with more extreme rates in sensitive areas. Rates of 2-5 m have been recorded in Mauritius (Flic en Flac, Pomponnette-Riambel and Belle-Mare) and of 22 m in Mozambique (near Chinde inlet between 1927 and 1983). Coastal erosion has been identified as a critical issue at the national level by Mauritius and Seychelles in the first phase of the African process. Although erosion rates are unknown in Seychelles, it is a major concern for the country. Increased wave intensity in Praslin Island and more frequent abnormal high tides increasingly accelerate erosion. Finally, coastal erosion is often offset by coastal accretion, this is observed in Mozambique, in Ghana and in Kenya where "*Beach accretion has taken place, such that beach hotels have lost their beach frontage*" (Kenya National Report).

The lack of available socio-economic data was underlined in the first phase of the African Process by most countries. This has prevented an accurate estimation of the socio-economic costs of erosion to be made. However, the fact that the coastal zone is highly populated and is the location where most economic activities take place means that the potential impacts of coastal erosion are very high in the region. For example, as mentioned in the country reports prepared during the first phase of the African Process, 25% of the population and 70% of industries are located on the coast in Ghana, 68% of the GDP is produced and 54% of the population is on the coast in Senegal, in Seychelles 85% of the human settlements and infrastructures are also situated on the coast. Costs in terms of loss of coastal infrastructure, land, economic opportunities and cultural patrimony are already high in the SSA.

Fish landing sites have been eroded in Gambia, the copra industry, situated on the beach, and thus the livelihood of thousands of people is highly threatened in Ghana. Cultural heritage such as forts and castles for example in Ghana, Gambia and Cote d'Ivoire have been damaged or are highly threatened. Houses have been damaged and land values on the Mauritius coastal strip is affected, the loss of land and properties due to coastal erosion in Cote d'Ivoire was estimated by the World Bank to be 1.9 billion FCFA in 1998. In Nigeria, assessments showed that loss of land to erosion and sea level rise in the Lagos State would affect tourism, commercial and residential facilities on the Victoria, Ikoyi and Lagos island to a cost of more than 12 billion US\$. In Senegal erosion has led to the destruction of a fishing factory, and of the Saloum Delta National Park guards house resulting in the closure of the unit in August 1989. A village was abandoned and population displaced due to erosion in Niodior and Dionewar (see National Reports).

- One of the most affected activities by coastal erosion is tourism. This was strongly emphasised in the country reports of the first phase of the African Process. Tourism is the 1st pillar of Seychelles economy (12.7% of the GDP and 2/3 of the labour force), the 3rd pillar of Mauritius economy, an important sector in Cote d'Ivoire and growing in Ghana. Irrational land use planning and development including insufficient set backs, dune and vegetation destruction by the tourism industry itself for example, have resulted in higher erosion rates, led to destruction of coastal infrastructures and caused a drop in tourism activities in areas where beach fronts have eroded away (e.g. Mauritius, Cote d'Ivoire, Senegal and Gambia). This issue has led to the use of expensive protection methods for example in Gambia where "*Two of the Gambia's most prestigious tourist resorts, Kairaba Beach and Senegambia Hotels, have already undertaken some very expensive protection measures to protect the hotels against beach erosion. Kairaba Beach Hotel for example has spent US\$ 400,000 on sand bagging using geotextile sandbags whilst Senegambia Hotel spent about US\$ 330,000 in 1998 to protect its beach by a sandbagging method*" (Gambia National Report). Failure to take a cross-sectoral approach to resource use in the Ada- Volta Delta Anyanui Estuary Mangrove Complex

station, 20-22m annually at Forcados station, 16-19m annually at Brass Station, 15 - 20m annually at Kulama station, and 20-24m annually at Bonny station and 10-14m annually at (Opobo river entrance) station (Ibe et al., 1985). *Nigeria National Report.*

Ibe, A. C., Awosika, L. F., Ihenyen, A. E., Ibe, C. E., and Tiamiyu A. I. (1985). Coastal erosion at Awoye and Molume, Ondo State, Nigeria. A report for Gulf Oil Company Nigeria Limited. 123p.

(AVDEAMC) has caused erosion (due to overexploitation of mangroves) and sediment transport changes (due to damming) resulting in key species habitat destruction and health hazards. This in turn is preventing the development of the area for tourism (see Ghana National Report). In Senegal, a touristic camp had to be displaced inside the islands due to erosion, however, new tourism opportunities were created in Djiffere due to the accretion process and the creation of beaches along the riverside (see National Reports).

Erosion is a threat to coastal activities but is also an impact of these activities. Indeed, anthropogenic activities are the main cause of coastal erosion in the countries, which consider it as a critical issue. These activities were found, in the causal chain analysis identified in the first phase of the African Process, to account for 45-50% of the erosion in Mauritius and Seychelles, 70-90% in Ghana, Cote d'Ivoire, Nigeria and Gambia. Sectors impacting the shoreline include farming through bad soil management and fisheries through the building of reef passes (Mauritius). However, activities which have the most impact on erosion are the energy sectors and urbanisation (including tourism). Damming for hydroelectric plants affecting stream flows and sediment budgets (e.g. in Ghana), the construction of oil refineries and wells, gas and oil pipelines, storage tanks with insufficient setbacks (e.g. in Nigeria) have been a main cause for erosion. Land reclamation in Seychelles, the use of sand and coral for urban and tourism constructions and the use of poorly designed sea defences (e.g. sea walls, groynes) have accelerated retreat rates in Ghana, Seychelles and Mauritius (see National Reports).

Other causes for erosion indirectly linked to human activities include global climate change and sea level rise which can be referred to as "sub-natural" phenomena have led to an increase in the strength and frequency of natural phenomena such as tidal surges, storms and cyclones. It is considered that storms, cyclones, tidal surges contribute substantially to shoreline changes in Seychelles and Mauritius where they are estimated to account for 50%-55% of coastal erosion. (see National Reports). Anthropogenic activities reinforce the effects of natural and sub-natural phenomena by reducing the natural capacity of the ecosystems to cope with natural phenomena. This is the case when natural erosion protection systems such as mangroves, coral reefs or marshes are overexploited and degraded.

Coastal erosion is a crucial issue for numerous countries in the region and contributes to exacerbating poverty in coastal zones. Without strengthening or developing a multi sectoral approach to coastal area management this issue cannot be tackled. This is true for other issues such as pollution, loss of key habitats or tourism development.

2. Objective and Expected Results

The aim of this project is to reduce constraints and support the development and implementation of ICAM process and its components, increasing sharing lessons learned, ensuring the sustainability of ICAM at the national level and tackling coastal erosion as a common issue in specific sites. Steps necessary to implement the project include identifying constraints to implementation or development of ICAM, reviewing lessons learned, completing appropriate plans, establishing more effective cross-institutional implementation mechanisms, stakeholders involvement mechanisms, public awareness programmes, strengthening legal, technical and institutional expertise, enhancing enforcement and compliance, and the defining sustainable financing mechanisms. The project will focus on the local and national levels and, at the same time, increase the sharing of experience and lessons learned through the development of a regional network of expertise and information dissemination on ICAM and erosion protection.

The implementation of this project, as part of an integral ICAM, will result in more effective coastal erosion protection, which is a priority for Seychelles, Mauritius, Ghana, Gambia, Senegal, Cote d'Ivoire, and Nigeria. Each of the components of the implementation process will contribute to ensuring the sustainability of ICAM implementation at the national and regional level.

By improving coastal management, the socio-cultural and economic cost of erosion will decrease (loss of cultural patrimony, loss of arable land, loss of key species/habitats, loss of tourism opportunities). Conflicting resource uses will be reduced which is in accordance with the countries aim to alleviate poverty and increase employment alternatives, one of the main employment alternatives identified at the national level being tourism development.

Intermediate problems addressed by the project will be the lack of:

- Institutional mechanisms enabling effective implementation of ICAM strategies at the national and local level (in the demonstration sites),
- Appropriate and practical stakeholders involvement mechanisms from the problem identification and decision making to the implementation phases of ICAM at the national and local levels (in the demonstration sites)
- Technical and legal capacity at the national and in the context of the demonstration sites,
- Public awareness on coastal erosion issues and on benefits of ICAM at the national and demonstration sites level
- Information and experience sharing at the sub-regional and regional level
- Sustainable financial mechanisms for implementation in the long term

Without addressing these immediate problems, unsustainable resource use and coastal erosion will carry on increasing.

Immediate issues addressed by the project: Facilitating the implementation process, the project will directly address the lack of coordination of policies and management decision in relation to coastal activities and resource use, in particular focusing on coastal erosion protection in some selected demonstration sites.

Indirect problems addressed by the project: By supporting ICAM implementation, the project will improve coastal resources management and development as well as coastal erosion management. This project will thus contribute to reducing resource use conflicts and indirectly address issues of poverty. Poverty alleviation is the most crucial priority in the region. The project will indirectly contribute to poverty alleviation as, by contributing to reducing resource depletion and erosion, it will contribute to the sustainability of existing coastal resource based livelihood systems, prevent the loss of cultural patrimony and prevent the loss, at the local level, of alternative employment opportunities, such as tourism.

TABLE 1: OBJECTIVES AND EXPECTED RESULTS OF THE PROJECT

OBJECTIVES	EXPECTED RESULTS
<p>Overall Objective:</p> <ul style="list-style-type: none"> • Improve coastal protection and the sustainability of resource use by supporting the development and implementation in the long term of ICAM policies in SSA particularly through the sharing of lessons learned and experience. 	<p>Overall results of the project:</p> <ul style="list-style-type: none"> • Improved and more coordinated resource use strategies in the long term • Improved and coordinated coastal erosion protection in the long term • Contribution to poverty alleviation
<p>Immediate objectives:</p> <ol style="list-style-type: none"> 1. Assess the level of ICAM implementation or development in participating countries, build on experiences and previous assessments. 2. Analyse and assess constraints to the development and or implementation 3. Reduce national specific constraints preventing ICAM implementation at the national level and local levels in all components of ICAM (i.e. institutional and legal aspects, human resources/capacity building, coordination mechanisms, stakeholders involvement, public awareness, monitoring and follow up). Emphasise learning and sharing experiences. 	<ul style="list-style-type: none"> • Learn from past experiences and lessons learned • Understanding of gaps in implementation and development of ICAM at the national level • Identification of constraints to the implementation or development of ICAM in participating countries • Completed or improved ICAM plans at the national level • Strengthened national institutional, legal, technical capacity in relation to ICAM development and implementation through capacity building efforts where identified as a need. • Improved or established management coordinating bodies if non existing and inter-ministerial coordination mechanisms at the national level • Increased and more effective stakeholder involvement mechanisms in the planning and

<p>4. Demonstrate at selected sites that increased integration of coastal management can contribute to improved coastal protection management</p>	<p>implementing stages of ICAM, Adaptive management process achieved. ICAM stakeholders' forums established (if Forums is decided to be the most appropriate way at the national level). Representative(s) of Forum included as full member(s) of the management coordinating body which would enable involvement of stakeholders at all stages of ICAM development and implementation</p> <ul style="list-style-type: none"> • Increased public awareness on erosion and coastal management issues • Improved or established monitoring and follow up procedures in order for management to be adaptive in time • Definition of more sustainable financing mechanism for ICAM implementation at the national level • Increased local technical, institutional, management and legal capacity at the site level • Improved management coordination at selected sites • Increased involvement of stakeholders at the site level • Increased coordination between local and national ICAM implementation policies
<p>5. Increase information dissemination and expertise exchanges within the region, sharing successes and failures, through training and capacity building (see objective 3 as well)</p>	<ul style="list-style-type: none"> • Increased expertise and information sharing on ICAM in the region

3. Project Components/Activities

Component 1. Constraints assessment and review of lessons learned and assessments

Activities include:

A1.1 ICAM status report/ identifying gaps: summarise existing information and complement information on the steps already achieved at the national level on ICAM, implementation and particularly in relation to coastal erosion.

A1.2. Identification of constraints affecting the development and/or implementation of ICAM strategies: Identification of the constraints to the implementation of ICAM at the national level. SRCU and national units or focal points decide on guidelines or strategy to be applied to investigate constraints. National teams and or regional experts will interview relevant stakeholders to identify constraint **or** series of workshops/meetings will be organised between national government departments involved in managing activities on the coasts, representatives of stakeholders. This is in order to determine at which level implementation is stalling.

A1.3. review of lessons learned and evaluation studies of ICAM initiatives

Component C2: Reducing constraints- Strategy design

Activities include:

A2.1 Complementing or developing ICAM plans in countries where needed. The project will coordinate and support the completion of plans where needed by facilitating consultation between government departments, consultation with stakeholders, and disseminating information. National teams will carry out this activity, supported if necessary by regional or international experts if needed (coordinated by the SRCU) will carry out this activity.

A2.2 Series of workshops to identify ways forward to implement ICAM, particularly in relation to addressing erosion/accretion issues. Constraint type based workshops will include

participating countries' government and administration (national and local levels) and stakeholder representatives as well as experts/government representatives/stakeholder representative of countries where process is more advanced and facilitators. Promote sharing the lessons learned and experience (illustrating difficulties, to pitfalls and potential solutions). Case studies from the region and outside the region may also illustrate some potential solution to constraints.

A2.3 Agreement on way forward and designing strategies and guideline to ICAM implementation tailored to each participating country. The way forward is to be identified during the workshop. Strategies will be drafted by national teams with the help of regional/international experts through the SRCU according to the countries capacity.

Component C3. Implementing constraint reduction strategy

A3. 1. Support the start of implementation of these strategies at the national level

On a needs basis:

- ***Institutional coordination:*** Assess existing mechanisms, use existing mechanisms if applicable or define new ones (or based on lessons from other countries) so that decision-making process across institutions is easier and more efficient with the institutions involved.
- ***Legislation:*** Assess existing legislative tools; amend existing tools if needed/draw out new legislation to empower the ICAM coordinating management body (including stakeholders' representative) to carry out ICAM implementation.
- ***Capacity building:*** Organise specific training for the country or on a constraint type basis through institutions, which have expertise in training (e.g. SEACAM). Personnel recruitment strategy designed.
- ***More effective stakeholder involvement:*** Stakeholder analysis carried out to identify that should be represented. Consult stakeholders. Assess the relationship between government and stakeholders, empowerment mechanisms, look at existing working mechanisms in other countries, see if appropriate, adapt. Survey perception of the stakeholders at national level of ICAM and links with institutions...
- ***Public awareness:*** Assess existing mechanisms and materials disseminated; assess efficiency (quick survey of stakeholders to evaluate knowledge of ICAM and particularly erosion issues and causes). Call in experts in the region to define cost effective strategies.
- ***Monitoring and follow up component:*** Define strategy to regular assess effectiveness of implementation mechanisms, public awareness surveys, set up database or information management system/ or give feed back to existing systems on coastal erosion protection and prevention, strategy to assess regularly stakeholders involvement, their perception on ICAM results and enforcement in relation to erosion.
- ***Financing mechanisms:*** Assess existing financing mechanisms and define if necessary strategies to increase the sustainability of ICAM financing (recurrent funding).

Component C4. Establishing ICAM plans and start implementation at the local level in selected demonstration sites with erosion problems

A 4.1 Confirm site selection

Confirm the selection of demonstration sites. So far a preliminary selection has been made and sites are listed in table 2. The sites selected have been designated as hot spots of sensitive areas in the national reports. The common issue of these threatened sites is coastal erosion or accretion (see national reports).

A 4.2. Establishment of a management plan and start implementation

A stakeholder analysis will be carried out at the site level. Issues will be analysed. Local ICAM working group will be established comprising government and stakeholder representatives. Assessment of resource use patterns contributing to the coastal erosion at the site level and other factors contributing to erosion will be assessed through previous studies and in conjunction with the work carried out in COS 1 (coastal erosion protection) and COS 3 (Impact of Global Climate Change on Coastal Zones. Linkages and information gathered

in the context of other projects at selected sites will be used and explored. Strategies agreed at the national levels will be discussed and adapted at the same time to the local context with the site working group. This activity is to set up integrated management mechanisms at the site level. Establish a management plan and start implementation. Focus will be on stakeholders involvement. Capacity building exercises will be carried out.

Component C5. Information dissemination and exchange of expertise/lessons learned

Activities include:

A5.1 Dissemination of workshop proceedings

A5.2 Feed back of results in information network database such as GOG-LME or Strategic Network for Ocean and Coastal Management (SIOCAM) or SEACAM database

A5.3. Promote sharing of lessons learned and experiences through study tours in-between pilot sites, dedicated intranet system for these pilot erosion sites, capacity building (at all stages of the process) etc.

Component C6: Project Management

Activities include:

A6.1 Set up of sub-regional coordination unit: Consult with participating countries on the institutional arrangements concerning the establishment and structure of a Sub-Regional Coordinating Unit (SRCU), recruit personnel and identify on call experts in the region, recruit project coordinator.

A6.2 Set up or identification of national focal points/coastal zone management coordination bodies: institutional and stakeholders analysis. Consult with participating countries and identify institutions and major stakeholders to be part of national coordination units committees or use/enhancing existing coordinating bodies (e.g. Mauritius the Coastal zone unit).

A6.3. Monitoring and evaluation of the project: provide quarterly activity reports and monitor the quality of the work, which will enable quick adaptation of the process.

Country participation and sites proposed: countries will contribute to different components of the project according to their capacity, needs and constraints. Although the national components of the project are to establish mechanisms to deal with a broad array of coastal issues as well as coastal erosion (C1, C2, C3, C5), demonstration sites proposed by participating countries especially target coastal erosion (C4).

Sites proposed correspond to hot spots identified during the first phase of the African Process where coastal erosion is a main issue.

TABLE 2: SUMMARY OF COMPONENTS TO WHICH COUNTRIES WILL PARTICIPATE

Requesting countries	Components/Activities	Demonstration sites
Cote d'Ivoire	All	Grand Bassam
Gambia	C1, C2, C3, C5, C6	
Ghana	All	AVEAMC
Kenya	All	Ngomeni
Mauritius	C1,C2, C3, C5, C6	
Nigeria	All	Lagos Islands
Senegal	All	Djiffere
Seychelles	All	Anse Volbert, Praslin
Non-requesting countries sharing information and experience		
Mozambique	C2, A2..2, C5	
Tanzania	C2, A2..2, C5	
South Africa	C2, A2.2, C5	

4. Linkages to Other National or Regional Activities/Transboundary Aspects

Other countries which could be interested in joining the project:

- Commonality of issues and transboundary considerations: Gambia, Benin, Togo, Cameroon, Equatorial Guinea, and Gabon as part of the GOG-LME.
- On the grounds of commonalities of issues: Mozambique, Comores and Madagascar.

Links with Regional and sub-regional programmes: The project main objective is directly in line with the Nairobi and Abidjan Conventions. Both Conventions have identified the institution and coordination of ICAM at the sub-regional levels as a priority as well as shoreline erosion management and monitoring. Similarly the project by focusing on implementation activities will strengthen and complement the GOG-LME programme which is supporting the development of ICAM plans at the national level. The proposed project would strengthen these processes at the national level (in participating countries) and take the process a step further, to implementation.

Links with on-going projects: Through its different components the project links up with different on-going initiatives at the sub-regional, national and local levels. It ties in and could benefit from the experiences of:

- IOC, COI-PRE, IUCN/NORAD initiative supporting the implementation of the Jakarta Mandate in the East African region, ICRAN/UNEP Ecosystem management approach in East Africa (to be started). The project will focus on activities which increase experiences in ICAM and contribute to the implementation of ICAM initiatives advocated within the framework of these initiatives.
- USAID/University of Rhode Island programme which contributes to the development of coastal management plans in Tanzania and Kenya (Kenyan Coastal Management Initiative, Tanzania Coastal Management Partnership), the MICOA/DANIDA ICAM development support project in Mozambique (coastal centre for sustainable development of coastal zones), the Coastal Zone Management Centre set up by the Netherlands in Kenya. ADB project supporting the Design of the Environment Management Plan for the Seychelles. SIOCAM projects on Integrated Management of the Lake Chad Basin and Integrated Management of the Benguela Current Large Marine Ecosystem, the FFEM Supporting project for the management of Senegal River. This project will increase the number of demonstration sites integrating the lessons learned from these projects.
- World Bank programmes: Coastal Zone Integrated Management Program in Benin, Integrated Marine and Coastal Biodiversity in Gambia, Coastal Wetlands Management in Ghana, Coastal Zone Integrated Management and Preservation of Biodiversity in Guinea, Coastal and Biodiversity Management Program in Guinea Bissau, Restoration of Round Island in Mauritius, Coastal and Marine Biodiversity Management in Mozambique, Namib Coast Biodiversity Conservation and Management Program in Namibia, Marine & Coastal Biodiversity Conservation in Senegal, Biodiversity Conservation & Marine Pollution Abatement I, Marine Ecosystems Management and Biodiversity Conservation - NEAP II in Seychelles, Cape Action Plan for the Environment: Implementation Program in SA. The project will strengthen the World Bank activities in relation to ICAM through increasing sharing lessons learned and experiences as well as through the supporting ICAM processes at the national level.
- On stakeholders' involvement specifically: IUCN programmes in Tanzania, Guinea Bissau and Comores supporting the development of community based fisheries/coastal management plans, IUCN/USAID/ TCMP in Tanzania where cross sectoral mechanisms were set up and strong stakeholder involvement were established to manage the coastal area and also could tie in with the establishment the Kenya Marine Forum (IUCN/USAID). The Kenya Marine Forum is being set up to facilitate coastal Stakeholders involvement in ICAM planning. Strong involvement of stakeholders in the planning and management of coastal areas is also the focus of the UNDP project in Madagascar and the WWF project in Mafia Island in Tanzania. This project will build on these experiences.
- In terms of capacity building and public awareness the project could be linked up with the GOG LME programme in West Africa, SEACAM in Eastern Africa, SIOCAM, WWF project in Kenya-Kiunga (Kenya), UNEP (manual published for integration of Coastal education in school curriculum in

East Africa). The lessons learned and experience gained from all these programmes will benefit the project which will encourage the sharing of these experiences.

- The project should link up with the "Eurosion" project lead by the National Institute for Coastal Erosion (Netherlands). This project aims at assessing coastal erosion status in Europe, review decision-making processes at the local level, improve decision-making by increasing information sharing, provide latest coastal defences, provide policy recommendations and encourage stakeholder involvement. The Eurosion as well as the COS 2 project could be strengthened by the promotion of sharing lessons learned and experiences.

Linking with the projects and programmes could be done through the set up of an internet site specifically for ICAM projects and programmes in Africa.

Baseline and lessons learned:

- On participatory process, awareness and local capacity building, the project will benefit from the baseline studies and lessons learned from World Bank programme "building local capacity for ICZM carried out in 1996-97 in Ghana.
- The project will also benefit from:
 - Assessments on ICZM constraints in West Africa and country profiles done in the framework of the GOG LME programme and by the World Bank national projects developed in the framework for ICZM developed since 1995.
 - The assessment of Integrated Coastal Management in Africa, done by the Government of Finland/UNEP/PAP (1998) aiming at presenting at PACSICOM, an assessment of ICM initiatives in Africa with the purpose to identify common elements in the approach, as well as success factors and weaknesses so as to improve ICM projects development, preparation and implementation.
 - Methodological guide to ICZM, UNESCO 97 (including a case of Gabonese littoral – production of coastal sensitivity atlas);
 - The work under MAP including 'Evaluation d' initiatives de gestion integree des regions littorales mediterraneennes';
 - The project East Africa 5 supported by SIDA focused on development of ICAM strategies for selected sites, implementation of ICAM projects and development and implementation of ICAM priority project. Including published documents on ICZM for example on the Xai Xai district coastal area management strategy.

5. Demonstrative Value and Replicability

The project will be implemented in the requesting countries, which will participate at different levels. Countries advanced in the process of ICAM development and implementation will participate through sharing information and lessons learned even if not requesting participation to the project. This is the case of Tanzania, South Africa and Mozambique. Other countries will participate only in some of the activities and components at the national level, this is the case of Mauritius, and some require the establishment of a demonstration site and will participate at the national and local levels. Finally some countries such as Senegal and Cote d'Ivoire will participate at all stages of this project.

Although the project will start in eight countries at different level of intervention, this tailor-made approach can be easily replicated across the region where the improvement of coastal area management is recognised as a need. Furthermore, peer pressure will encourage the replication of demonstration sites.

This project aims at establishing a process at the national and local level, which is easily replicable and flexible. Later, participants will benefit from the lessons learned in this first phase as well as from the information, expert network and from the coordination skills developed at the regional level by the SRCU.

6. Risks and Sustainability

The main assumptions for these project are: that there is a long term to commitment to ICAM and erosion protection, that consensus between local users and government agencies is attainable and that stakeholder consultation and empowerment is enabled at the national and local levels, that the political context in the participating countries, and hence commitment remains relatively stable.

Risks: Risks are limited. The main risk is that government commitment is not carried because of the different perception of the changing administrations.

Sustainability: Sustainability is an integrated part of the project design. The sustainability of projects result will mainly depend on the effectiveness of the stakeholder involvement, the appropriateness of the implementation ICAM guidelines to the national and local contexts, the adequate technical, legal and institutional capacity and expertise at the national level and on the long-term political and financial commitment of decision makers.

In order to ensure the sustainability of the results:

- For effective stakeholders involvement the project will ensure if needed:
 - Mechanisms to empower and facilitate consultation with local stakeholders groups and authorities are part of the planning and implementation of ICAM.
 - Stakeholders awareness
 - Practical and adequate selection process of stakeholders' representatives who will participate in stakeholder forums (if stakeholder forums are considered as appropriate).
 - Forums formalised and empowered for implementation with some enforcement if necessary
 - Links between policy makers are appropriate and "go both ways"
- ICAM implementing measures will be tailored to the national needs. This will ensure that measure and guidelines are appropriate at the national level. Constant interaction between the regional, national and local levels will ensure that sub-regional coordination unit works in total partnership with national focal points and in consultation of both national and local levels in the four sites.
 - Priority is put on capacity building at the local (including local authorities) and national levels so that external expertise is not needed or only needed on a punctual basis. Most of the expertise will be drawn from the region; intra-regional exchanges of experiences and lessons learned will be promoted.
 - Budget allocation to ICAM and policies express the government commitment to ICAM. Mechanisms for the private sector and NGOS and CBOs to contribute financially or in kind particularly through the commitment of personnel to ICAM enforcement/implementation will be investigated

External Funding: The first phase (5 years) of the project will be funded externally with in kind help from countries in the region (e.g. expertise, logistics for the SRCU).

External financing will support:

- The set- up of the ICAM implementation process in the first phase: constraints assessments, series of workshops, establishment of the SRCU, capacity building (through existing sub-regional organisations such as SEACAM), the set up of information management process on ICAM, demonstration sites etc. will be partially funded by external sources under the conditions that participating countries commit to make ICAM a priority through policy and implementation efforts and commit a budget to ICAM at the national level and show effort through out the process.

When the external support has ceased (recurrent funding) as envisaged- to be discussed:

- **ICAM implementation:** committed budgets at the national level will be complemented by private sector contributions. These contributions should be encouraged, and could take the form particularly through revolving trust funds...This will only work if the private sector sees the funds are directly going to ICAM and they see the benefits of ICAM to their sector. Contribution could also be in the form of expertise, work, and time for some of the enforcement activities for example from local NGOs, CBOs.

- **SRCU functioning:** after the initial set up phase the SRCU should be low cost to run, one staff/coordinator and small office. The SRCU's aim will be to provide a service to countries on a needs basis and disseminate information. "Member countries" will be asked to commit to partly (50%) sustain the SRCU through yearly direct contributions towards the payment of the staff, office running and maintenance of the information network. The SRCU will also seek funds for its sustenance complementing the countries contributions (50%). When a service is needed, the SRCU will identify the best expert (ideally within the region) or a team of experts and send it to the demanding country. The service will be paid by the demanding country (fees of the expert(s) and cost of the travel, the demanding country will also cover the cost of the SRCU if any). Agreements between "SRCU- member" countries could include agreements on exchange of expertise etc.

To ensure that ICAM implementation is sustained, the SRCU will provide a yearly appraisal on progress of ICAM implementation/enforcement at the national levels and give feed back to member countries, providing recommendations on how to improve the process on no cost bases for the member states.

7. Stakeholder Participation

Project stakeholders: national agencies through cross-ministerial units, research institutes, coastal user-groups including the tourism industry, coastal residents, local fishers, farmers, developers, sand mining companies, CBOS and NGOs will be involved at all stages of the project. These stakeholders will be involved and also the beneficiaries of the project.

Local administration, CBOs, NGOs and private industries will be involved through the establishment of a forum in each participating country, if the format is agreed as appropriate. Stakeholders including local authorities, CBOs and NGOs will select two "stakeholder representatives" who will participate to the decision making at the national level or alternatively decisions voted by the forum on priority issues and course of actions will be put forward to the cross-ministerial unit. In the latter case, the cross ministerial units will give feed back and explanations on their decisions to the stakeholders or directly through the forum or indirectly through stakeholders representatives. The Sub-Regional Coordination Unit will act then as a facilitator to set up this two-way communication process.

Roles in the monitoring process will be allocated to stakeholders by stakeholders themselves through the forum or other platform according to their capacity.

8. Project Management and Implementation Arrangements

A sub-regional coordinating unit (SRCU) composed of a regional expert network and a small permanent cell will carry out activities in partnership with the coordinating units of the participating countries. The SRCU will provide "on site" service and act as a facilitator and coordinator of activities at the national and sub regional level. One of its main objectives will be to facilitate exchanges of information and lessons learned within the region on ICAM as well as pull together regional expertise.

At the national level, steering committees/working groups or existing coastal zone units (e.g.: the Coastal Zone Unit in Mauritius) will act as focal points. These focal points, led by the national executing agency, will coordinate the activities in partnership with the SRCU and identify national teams to carry out Components 1, 2, 3 and local teams to carry out component 4. Governmental agencies and representatives of coastal user groups will be involved at all stages of the process through a representative Forum. At the site level, a working group including local stakeholders, local and national government representatives will be involved. The SRCU or the national focal point will be involved and facilitate the consultation process. Representatives of the national level need to be represented in these sites working group to ensure a link between processes developed at the site level and processes being developed at the national level.

The project will be carried out at the **national and local level** in the case of demonstration sites. However to improve coordination, cost efficiency of capacity building, information dissemination and exchanges of expertise and lessons learned within the region, it was felt that a regional dimension given by the SRCU should be added.

9. Project Financing and Duration

The project will be funded for 5 years externally with in kind and cash help from participating countries. Countries will be asked to take over the financing of the SRCU when external contributions come to an end in order for the service provided by the SRCU carries on. Countries would provide in kind support to maintain the SRCU in terms of logistics during the 5 years of the project. The grand total is estimated to be 11. 896 millions USD 1.66 of which would come as in kind co financing by participating governments.

The budget is tentative. It is based on the 8 countries participating at different levels. The budget will also vary according to the number of constraints identified at the national level. The budget will need further discussions.

TABLE 3: COMPONENT AND ACTIVITY FINANCING (Tentative)- Based on 8 participating countries at different level of intervention

	External Sources of Funds	National Government (s)		Total
		Cash	In-kind	
Component 1: Constraints assessment	340 000		180 000	520 000
<u>Activity 1.1</u> : ICAM status report	160 000		80 000	240 000
<u>Activity 1.2</u> : Identification of constraints	160 000		80 000	240 000
<u>Activity 1.3</u> : review lessons learned and studies of ICAM initiatives	20 000		20 000	40 000
Component 2: Reducing constraints - Strategy design	880 000		220 000	1 100 000
<u>Activity 2.1</u> .: Complementing or developing ICAM plans	240 000		60 000	300 000
<u>Activity 2.2</u> : Series of workshops	320 000		80 000	400 000
<u>Activity 2.3</u> : Agreement on way forward	320 000		80 000	400 000
Component 3. Implementing constraint reduction strategy	2 000 000		400 000	2 400 000
<u>Activity 3.1</u> : Support implementation strategies at the national level	2 000 000		400 000	2 400 000
Component 4: Demonstration sites	6 006 000		610 000	6 616 000
<u>Activity 4.1</u> . Confirm sites	6 000		10 000	16 000
<u>Activity 4.2</u> . Management plan and start Implementation	6 000 000		600 000	6 600 000
Component 5: Information dissemination and exchange of expertise/lessons learned	600 000		160 000	760 000
<u>Activity 5.1</u> : Dissemination	200 000			200 000
<u>Activity 5.2</u> : Feed back of results in information networks	100 000		100 000	200 000
<u>Activity 5.3</u> : tours and intranet systems	300 000		60 000	360 000
Component 6: Project Management	410 000		90 000	500 000
<u>Activity 6.1</u> : Set up of sub-regional coordination unit (SRCU)	80 000		50 000	130 000
<u>Activity 6.2</u> : Set up or identification of national units	80 000		40 000	120 000
<u>Activity 6.3</u> : Monitoring and evaluation	250 000			250 000

Note: This budget is preliminary and has not undergone a full consultation process with the respective countries. Therefore, does not indicate the actual financial commitment that would be provided by participating countries once the project proposal and its components are finalised.

10. Monitoring Evaluation and Dissemination

Information dissemination: Information on the project results and progress, information on the exchanges of best practices, lessons learned, up dates on the project progress will be disseminated through, peer-reviewed publications, Information fed to existing databases and SRCU information network (if set up). Every year presentation of results and progress to stakeholders in each participating countries (using oral presentation and visual tools)

Monitoring and evaluation of project progress (see also logframe matrix):

- Quarterly reports of activities carried out produced by project manager endorsed by the national focal points and stakeholders forums
- Involvement of stakeholders: yearly survey/ question answer sessions with stakeholders on the way they feel their involvement is progressing, could be improved etc. by SRCU
- Yearly survey of government agencies on stakeholders involvement process and ways to improve it by SRCU perception of their involvement
- Yearly appraisal of the public awareness campaigns, survey of stakeholders and evaluation of progress on knowledge. Can be done by focal points.
- Monitoring of user conflicts by stakeholders forum
- Report number of people trained and interview (their perception of the training in relation to the task they will have to carry out, what they feel they would need, this in consultation with the national focal point).

Performance indicators of the project results: see Logframe Matrix.

12. Logframe Matrix

2 Summary	Objectively verifiable indicators	Means of Verification (Monitoring Focus)	Critical Assumptions and Risks
<p>Overall goal of the intervention</p> <p>Improve coastal protection and the sustainability of resource use by supporting the development and implementation of ICAM policies in SSA</p>	<ul style="list-style-type: none"> - Improved and more coordinated resource use strategies in the long term - Coordination and management of coastal erosion protection improved - Reduced resource based conflict - Poverty alleviation 	<ul style="list-style-type: none"> - Satisfactory final reports received by year 5 - Peer review - publications, reports, manuals on the process produced. - Implementation of ICAM carries on after project ends in the region 	<ul style="list-style-type: none"> - Long term commitment to ICAM and erosion protection -Changes of priority with changes of government
<p>Objectives</p> <ol style="list-style-type: none"> 1. Assess the level of ICAM implementation or development in participating countries 2. Analyse and assess constraints to the development and or implementation 3. Reduce local specific constraints preventing ICAM implementation at the national level and local levels 4. Demonstrate at selected sites that ICAM implementation contributes to improve coastal protection 5. Improve and increase information and experience sharing within the region on ICAM and coastal erosion management. 	<ol style="list-style-type: none"> 1. Report describing the status of ICAM implementation and/or development in the participating countries done. 2. Constraints identified and described in a report 3. Strategies defined to reduce constraints identified in the constraints diagnosis implemented. Mechanisms needed in place for components of ICAM or nearly in place by year 5 4. Improved coastal protection management in the sites. 5. Improved and updated database of expertise in the region on ICAM and coastal erosion management. Information dissemination improved. 	<ol style="list-style-type: none"> 1. By beginning year 2, ICAM status report approved by national team/.focal points available. 2. By the middle of year 2, constraints diagnosis report approved and reviewed by national focal points available. 3. By year 5, report comparing constraints identified and mechanisms being establishes, reviewed by national focal points available. 4. By end year 5, report comparing coastal erosion protection management in place at the beginning of implementation and at the end of the first phase of the project, reviewed by site working group and national focal points available. 5. Information and expertise fed into a new of existing database. Peer reviewed publications. 	
<p>Project Outcomes:</p> <ol style="list-style-type: none"> 1. Improved coordination and resource management including improved management of coastal erosion protection at the national level in the long term 	<ol style="list-style-type: none"> 1.1. Decrease in conflicting measures 1.2. Decrease in number of stakeholders involved in damaging/illegal activities 1.3. Sustainable financial mechanisms in place 1.4. Sustainable stakeholders involvement mechanisms in place 1.5. Increased public awareness on ICAM issues 1.6. Monitoring mechanisms in place 1.7. Reduced user based conflicts 	<ol style="list-style-type: none"> 1. By end year 5. Final reports available comparing the situation at the beginning of the project (baseline studies) and at the end of the project. 	<ul style="list-style-type: none"> - Long term commitment to ICAM and erosion protection - Political context remains stable in the participating countries

<p>2. Improved coastal erosion management at site level</p> <p>3. Contribution to poverty alleviation</p> <p>4. Increase information dissemination and experience exchanges in the region</p>	<p>2.1. Increased local technical, institutional and legal capacity at the site level</p> <p>2.2. Improved coordination mechanisms</p> <p>2.3. Increased of stakeholders involvement</p> <p>2.4. Reduced number of resource based conflicts</p> <p>2.5. Reduced number of conflicting legislations between national and local level</p> <p>2.6. Improved awareness material about coastal erosion issues</p> <p>3. Increase or stabilisation of the livelihood opportunities basis at selected sites in the participating countries/ Occupational structure</p> <p>4. Information in databases and databases accessible at local, network of experts consolidated within the region</p>	<p>2. By end year 5. Final reports available comparing the situation at the beginning of the project (baseline studies) and at the end of the project.</p> <p>3. By end year 5. Final reports available comparing the situation at the beginning of the project (baseline studies) and at the end of the project.</p> <p>4. By end year 5. Final report.</p>	
<p>Project outputs</p> <p>1. ICAM status report</p> <p>2. Diagnosis of constraints on implementation or development of ICAM in countries participating to the project</p> <p>3. Workable ICAM plans</p> <p>4. Recommendation options and guidelines to reduce identified constraints</p> <p>4.1.. Strengthening of national and local institutional, legal and technical capacity</p> <p>4.2.. Establishing coordinating bodies</p> <p>4.3. Involving stakeholders in ICAM</p> <p>4.4. Increasing public awareness</p> <p>4.5. Monitoring and follow up</p>	<p>1. By beginning year 2, ICAM status report underlining gaps in implementation available</p> <p>2. Analysis and identification of constraints carried out by national teams</p> <p>3. .By end year 2, ICAM plans completed</p> <p>4. On the basis of the diagnosis, strategies and recommendation options will be defined. By end year 2: series of constraint themes workshops carried out and</p> <p>4.1 Legal, institutional and technical capacity assessed. Strategies on how to tackle the lack of capacity defined</p> <p>4.2. Existing coordinating mechanisms and bodies assessed. Strategies on establishing coordinating mechanisms in the participating countries defined. 4.3.a. Stakeholders analysis done</p> <p>b Stakeholders involvement status assessed. Strategies to improve involvement defined for participating countries.</p> <p>4.4. Stakeholders awareness of ICAM issues, particularly on coastal erosion assessed. Strategies to improve awareness in participating countries defined.</p> <p>4.5. Monitoring procedures assessed and strategies to improve or establish them defined.</p> <p>4.6.a Assessments of possible financing mechanisms</p> <p>b, Agreement on financial mechanisms achieved at the national and local level</p>	<p>1. By beginning year 2, report reviewed and approved by the national focal points.</p> <p>2. by end month 3, year 2, diagnosis report on the constraints available, reviewed by national focal points.</p> <p>3. 6 monthly progress report on ICAM plans status reviewed by national focal points</p> <p>4. 1. By end month 1 year 3, workshop proceedings available and reviewed by national focal points</p> <p>b. By mid, year 3 re port on strategies agreed upon available and reviewed by national focal points.and stakeholder "forums"</p>	<p>- Consensus between government agencies at national and local level and stakeholders is attainable</p> <p>- Stakeholder consultation and empowerment s enabled at the national levels</p>

<p>5. On a needs basis at the national and site levels (where appropriate)</p> <p>5.1. Strengthened national and local institutional, legal and technical capacity</p> <p>5.2. Coordinating bodies</p> <p>5.3. Effective involvement of stakeholders in ICAM</p> <p>5.4. Increased public awareness</p> <p>5.5. Monitoring and follow up components of ICAM process to be set up</p>	<p>5. On a needs basis</p> <p>5.1.a By end of year 4 training courses organised at site level, national or regional levels</p> <p>b. Trained personnel in ICAM related subjects present at sites and at national level</p> <p>c. Access for the coordinating body to technical expertise</p> <p>5.2a . By end of year 5 Memorandums of understanding between institutions involved in ICAM present at national and site levels</p> <p>b. By end of year 5 cross sectoral coordinating bodies in place and empowered (national)</p> <p>c. By end of year 5 Presence of legal tools empowering the coordinating body (national)</p> <p>4.3a. Consultative mechanisms in place (national and site levels)</p> <p>b. Representation of all stakeholders in the decision making process (site level)</p> <p>c. Information dissemination mechanisms to stakeholders present</p> <p>d. By year 5. Evolution in stakeholders' perception on their involvement in the ICAM decision making process (stakeholders perception surveys).</p> <p>5.4.a..Materials and dissemination improved by year 5</p> <p>b. By year 5 Improvement of stakeholders awareness of ICAM issues after intervention compared to baseline survey done before information at sites (awareness surveys)</p> <p>c. Evaluation of effectiveness of mechanisms: practicability, delays between decision and actions, enforcement capacity, legal tools used and efficiency-look at the numbers of infractions to IMCAM, the number processed, the perception of the stakeholders on the enforcement. (national and site levels)</p> <p>5.5.a. By year 5 Monitoring mechanisms in place (national and site levels)</p> <p>b. By end of year 5 project information management system in place (at national level)</p> <p>5.6. a. By end year 5 options financial options identified involving different user groups. (national and site)</p> <p>b. By end year 1 participating countries financial commitment for ICAM expressed</p>	<p>5.1. - Report on number of personnel trained reviewed by national focal points available</p> <ul style="list-style-type: none"> - By end year 5 adequately trained personnel in position. <p>5.2.- Yearly progress report on establishment of coordination mechanisms and bodies reviewed by national focal points and site working group</p> <ul style="list-style-type: none"> -By end year 5: coordinating mechanisms in operation <p>5.3. -.By end year 5 report on consultation mechanisms in place in participating countries reviewed by national focal points available and site working group.</p> <ul style="list-style-type: none"> - Results of yearly survey of government agencies on stakeholders' involvement available - Results of yearly stakeholders' survey on their involvement in ICAM process available - Report describing feed back mechanisms status to the stakeholders reviewed by national focal points and stakeholders' forum <p>5.4. - By end year 5 status report on the changes in materials and dissemination reviewed by national focal points available and stakeholder forum</p> <ul style="list-style-type: none"> - Results of yearly stakeholders' awareness surveys available (sites) <p>5.5. - By end year 5 report on monitoring mechanisms status reviewed by national focal points available and site working group</p> <ul style="list-style-type: none"> - By end year 5 some stakeholders participate in the monitoring process (at sites) - By end year 5 information and results fed into information existing or established information management system <p>5.6. - By end year 5 report on financial options analysis reviewed by national focal points available and site working groups</p> <ul style="list-style-type: none"> - By end year 1 written financial commitment from participating countries <p>6. - By end year 5 results of process fed into appropriate databases and available on a</p>	
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<p>5.6. Sustainable financial mechanisms</p> <p>6. Information management system</p>	<p>6.a. By end year 2 information management systems relevant to ICAM in the region identified b. By end month 6 existing databases in the region relevant to ICAM identified By end year 5 results, case studies disseminated to appropriate databases and available at the SRCU.</p>	<p>regional, national and local basis</p>	
<p>Project components (C)/ activities (A)</p> <p>C1. Constraints identification A1.1. Background study on all components of ICAM A1.2. Identification of constraints/fact finding missions on all components of ICAM A1.3. Review lessons learned and previous evaluations of ICAM initiatives</p> <p>C2 Reducing constraints A2.1 Complementing or developing ICAM plans A2.2 series of workshops A2.3. Agreement on way forward</p> <p>C3. Implementing constraint reduction strategy A 3.1: Support implementation of these strategies at national level</p> <p>Component 4: Demonstration sites A 4.1. Confirm sites A 4.2. Management plan and start implement</p>	<p>Activities carried out (refer to timeline and budget)</p>	<p>Quarterly activity reports to adapt project management.</p>	<p>Reports available and reviewed</p>

<p>C5: Information dissemination and exchange of expertise/lessons learned A5.1 Dissemination of proceedings A5.2 Feed back results in existing databases A5.3 Tours and intranet for pilot sites</p> <p>C6: Set up management and coordinating bodies A6.1. Set up SRCU A6.2. Identification national focal points/composition A 6.3. Monitoring and evaluation</p>			
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ANNEX 1: Brief ICAM status (draft).

Country	Definition of plan	Implementation of plan: - Coordinating body - Legal, technical, institutional tools - Implementation objectives of plan	Follow up and monitoring	Capacity building	Public awareness	Stakeholders involvement
C.I.	Draft plan	-coordination of bodies on going -some	- plan needs to be revised	-need more	Some through NGOs	?
Ghana						
Gambia	developed with indications of actions to be taken by respective Departments and sectors	Creation of a Coastal Zone working Group Need more capacity Started	Some disposition	Needs Recruitment of personnel need to be trained	Some	Some
Kenya	- Strategy and AP for Nyali-Bamburi-Shanzu, others are following.	- Coastal Management Steering Committee operational. With Secretariat based in CDA. - Institutional and technical capacity in lead agencies (NEMA, CDA, KWS, KMFRI). Legal capacity in Env. Mngt. Act (1999) - Activities to implement specific plan components with USAID/CRC-URI (public awareness, demonstration sites, capacity building)	Some. Mostly because involvement of stakeholders.	Some training. Need more institutional capacity.	Some. Fact sheets and Beach Clean ups..Marine Day etc.	Kenya Marine Forum. Mechanism to involve all types of coastal user groups. The CMSG also brings many govt. Dept and NGOs together.
Mauritius						
Moz.		- Inter-institutional committee established and Centre for Sustainable Development in Coastal Zone established - Yes - Yes working on it		Limited	Yes some in particular areas	Yes in some areas
Nigeria	Incomplete	- Coordinating body about to be created - Some capacity - No implementation	No	Some	Very low	Low
Senegal	No	- No	No	No	No	-little
Seych.						
S.A.						
Tanzania	- Draft National ICM Strategy (NICMS) and Action Plan to be implemented July 2002.	- Co-ordinating Body has been created – Tanzania ICM Office (TICMO) should be operational in July 2002. - Working towards implementation of the Strategy and action Plan has started in 3 Pilot Coastal Districts. - 7 out of 13 of Tanz. Coastal districts have for more than 5 years ICM field based programs.	Monitoring Plan in all coastal districts. Monitoring component in NICMS and AP.	Some but need more work.	In progress. Need more work.	- From planning to implementation of ICM plans. Strength of TZ.

Source: country coordinators.