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Third Project Steering Committee Meeting for the WIOSAP Project and First Project Steering Committee meeting for the SAPPHIRE project

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THIRD PSC MEETING FOR WIOSAP PROJECT: <u>SESSION V</u> ON APPROVED DEMO PROJECT PROPOSALS-FIRST ROUND SUBMISSION

Session V. Part 1: Approved Demo Project Proposals: First Round Submission 1.0 Background

What we do on land has a huge impact on our oceans. Activities such as development, pollution, deforestation, etc. can place undue stress on our marine and coastal resources—putting our ecosystems, jobs, and even health at risk. The WIOSAP Project is intended 'to reduce impacts from land-based sources and activities and sustainably manage critical coastal and marine ecosystems through the implementation of the agreed WIO-SAP priorities with the support of partnerships at national and regional levels'.

The Nairobi Convention, whose ten Contracting Parties have pledged to reduce landbased stresses on the Western Indian Ocean, is well placed to harness the capacity, partnerships, and political will necessary to tackle such a large problem. The Convention's GEF funded WIOSAP project strives to reduce these land-based stresses by protecting critical habitats, improving water quality, and managing river flows. To this end, the project is funding several demonstration projects in the Western Indian Ocean (WIO) countries to address various land-based stresses. Demonstrated projects will be funded under the following WIOSAP components and will vary from country to country based on national priorities:

Component A: Sustainable management of critical habitats focuses on the protection, restoration and management of critical coastal habitats and ecosystems recognizing the enormous value of healthy critical coastal and marine habitats for the future wellbeing of people in the WIO region.

Component B: *Improved water quality* focuses on the need for the WIO Region's water quality to attain international standards by the year 2035.

Component C: Sustainable management of river flows aims at promoting wise management of river basins in the region through implementation of a suite of activities aimed at building the capacity for environmental flows assessment and application in river basins of the region.

Component D of the Project supports cross-cutting aspects including governance, project management/coordination and regional cooperation.

2.0 The Process

A widely distributed call for concepts on demo projects went out end of June 2018 and a dateline of one month given for submission of concepts guided by a prescribed template and supporting background document, which detailed the WIOSAP priorities. An extension of the dateline was sought by governments and others partners and thus the dateline reviewed till 15th of August 2018. By close of the dateline, 45 concepts had been submitted to Focal Points/PMU across 7 countries.

The 2nd PSC approved the roles of National Implementation Committees (NICs) and criteria for concept evaluation by NICs at national level. NICs are chaired by the Focal Point for the Nairobi Convention/WIOSAP Project Focal Point in each beneficiary

country. The criteria and process for evaluation at national level, which was approved by the Project Steering Committee (PSC) included: Relevance of the action to WIO-SAP priorities; linkage to national, regional and global priorities; participatory project design; cost effectiveness and leveraged co-funding; sustainability of the action; innovative value in terms of proven solution; theory of change and institutional mandate. The concepts were rated at a maximum score of 100% and only those which scored 70% and above and were screened by the PMU and forwarded to the Regional Experts for the 2nd level of review. A total of 13 concepts qualified for the regional review process.

A joint Focal Points and experts meeting of the 3 Regional Task Forces (Critical Habitats, Water guality and River Flows) of the WIOSAP Project was convened in Dec 2018 in Maputo to review the concepts. The Focal Points helped give clarity on the national level review as the experts embarked on the technical review. Review at regional level focused on the technical proficiency of submitted concepts including rationale/justification; clarity of objectives, alignment to rationale and whether achievable within the project timeframe; clarity of results and alignment to objectives; and lastly regional relevance and thus potential for replication/up-scaling beyond the proposed site/country. However, if promising concepts especially those from mainstream government institutions were found to propose plausible interventions meeting all other requirements but needing further technical support to make them sound and competent, such concepts were considered and subject to requests from the concerned countries, the PMU made arrangements to provide such technical support in the development of the said proposals. All the 13 concepts below were recommended for full proposal development by the regional experts with varying extent/scope of recommendations ranging from minor recommendation, major recommendations to those required external technical support:

Component A: Sustainable Management of Critical habitats

- Enhancing stakeholder capacity on use of ICZM as a tool for conservation of the coastal and marine environment through a demo ICZM Project in Malindi – Sabaki Estuary Area, Kenya
- 2. Towards integrated spatial planning for sustainable management of coastal and marine resources in Kilifi county, Kenya
- 3. Gestion durable des mangroves de la régionlittorale de Boeny, Madagascar
- 4. Coral culture for small scale reef rehabilitation in Mauritius
- 5. Habitat restoration and attraction of seabirds to Ile aux Aigrettes (Mauritius)
- 6. Vulnerability Assessment of Blue Carbon Ecosystem (Seagrass) around the island of Mauritius
- 7. Community-based ecological wetland rehabilitation using an Ecosystem-based approach (Seychelles)

Component B; Improved Water Quality

8. Improving Mtwapa Creek water quality by use of Constructed Wetland Wastewater Treatment technology in Shimo Ia Tewa'– IMCoW Project

- Strengthening regulatory framework and national capacity for monitoring effluent discharges, water, and sediments quality in coastal and marine areas of Madagascar
- 10. Improving Water Quality by use of Constructed Wetland Wastewater Treatment at a Farm in the South of Mahé Island
- 11. Improvement of ecosystem health and water quality by implementing a Source to Sea based approach to tackle marine litter in five priority river systems in Durban, Kwazulu-Natal, South Africa
- 12. Improvements in Marine Water Quality through enhanced Estuarine Management

Component C: Sustainable River Flows

13. Sustainable management of E-flow for west coast rivers of Madagascar (case of Betsiboka river)

The PMU prepared a meeting report and summary of the regional review process and in consultation with the Chair of the PSC (Kenya) sought for virtual consideration and approval of the 13 concepts from the PSC to facilitate progression to full proposal development. The PSC gave approval of the 13 concepts for full proposal development in Feb 2019. The PMU invited proponents for recommended concepts to submit full proposals and gave a dateline of one month till 5th of March 2019. Twelve full proposals were submitted, while one from Seychelles wasn't submitted from the originally recommended concepts. Madagascar requested major technical support in developing two of its proposals and thus only 10 proposals were subjected to regional expert review. Eight proposals were recommended by the regional experts for submission to PSC for consideration, while two are still undergoing review. PMU submitted a summary of the regional review process of the 8 proposals to PSC for consideration and approval during the Ad hoc PSM meeting held on the 28th of May 2019 in Mauritius on the sides of the WIO Science to Policy meeting. The PSC noted that Component B on Water Quality has been over-scribed and thus no additional concepts/proposals on this Component can be considered except those under review. This may also require moderation of budgets of the approved/recommended proposals even as the PMU discusses with SAPPHIRE and WIOMSA on potential synergy and co-financing.

Below is the summary of the proposals which were approved by the Ad hoc PSC.

	Proposal Demo Project	Objectives of demo project	Expected Results
	Title		
	Component A: Sustainable	management of aritical habitate	
1.	Enhancing stakeholder capacity on use of ICZM as a tool for conservation of the coastal and marine environment through a demo ICZM Project in Malindi –Sabaki Estuary Area, Kenya	 Overall Objective: To enhance stakeholder capacity on use of ICZM as a tool for conservation of the coastal and marine environment through a demo ICZM Project. To promote sustainable mangrove and fisheries management in Sabaki To promote community empowerment and alternative livelihoods in Sabaki estuary To improve governance and management of Sabaki Estuary To improve solid waste management in Malindi town 	 Improved mangrove and fisheries management in Sabaki estuary Empowered community embracing alternative livelihoods Improved governance and management Improved solid waste management in Malindi town Enhanced practice and uptake of ICZM as a tool for management of coastal and marine environment
2.	Towards integrated spatial planning for sustainable management of coastal and marine resources in Kilifi county, Kenya	 Overall Objective: Kilifi County Spatial Plan implemented by 2020 for sustainable management of coastal and marine resources and enhanced socio-economic development Kilifi County Spatial plan is finalised and endorsed for operationalization by Kilifi County Government and stakeholders fully operational GIS lab in Kilifi County for integrated data management and information sharing Critical Ecologically Significant Areas (CESA) secured in Kilifi County 	 Capacity for implementation of Kilifi county spatial plan enhanced Effective continuous data collection, analysis and dissemination for programmes and functions within Kilifi County Critical ecosystems and natural resources secured
3.	Coral culture for small scale reef rehabilitation in Mauritius	Overall objective: To mitigate the impact of climate change on coastal communities by implementing coral reef restoration initiatives	 Trained work-force in coral culture and reef rehabilitation

Table 1: Demo project proposals approved by the ad hoc PSC on 28th May 2019 in Mauritius

		 Set-up sea-based demonstration farms for culture of selected resilient corals for rehabilitation of degraded reef sites. Train stakeholders and coastal communities in coral culture and reef rehabilitation techniques. Strengthen environmental awareness and conservation aspects of corals and coral reefs. 	 Restoration of reef ecosystem services through rehabilitation of degraded reef sites Environmental awareness and stewardship among fishers and local communities
4.	Habitat restoration and attraction of seabirds to Ile aux Aigrettes (Mauritius)	 Overall objective: To restore coastal forest habitat on Ile aux Aigrettes, specifically 'seabird habitat', and restore terrestrial and near-island marine ecosystem functioning through the attraction of seabirds. reduce threats from invasive alien species Restore on Ile aux Aigrettes forest Facilitate awareness of the site and critical conservation issues Facilitate knowledge exchange and understanding of conservation issues at regional and national level 	The project will enable Mauritians to learn about their natural heritage and the importance of biodiversity conservation at national and global level
5.	Assessment of a Blue Carbon Ecosystem in Mauritius	 Overall objective: To assess the current status of seagrasses in Mauritius and their carbon sink potential towards conservation and rehabilitation of seagrass ecosystem in Mauritius Conduct surveys on the density and distribution of seagrass around Mauritius Island Establish permanent seagrass monitoring stations at specific sites around the island Carry out sediment coring at specific seagrass sites around the island to determining carbon storage 	 Island-wide assessment and monitoring of the seagrass diversity and distribution realized Blue carbon storage and generation of blue carbon credit determined

		 Analysis of carbon sequestration content in sediment Calculation/generation of blue carbon credit 	
	Component B: Improved w	ater quality	
6.	Improving Mtwapa Creek water quality by use of Constructed Wetland Wastewater Treatment technology in Shimo la Tewa	 Overall objective: To enhance conservation of marine resources in Mtwapa Creek from pollution using constructed wetland for wastewater management. Redesign, rehabilitate and improve operation of existing constructed wetland at Shimo la Tewa Prison. Improve general sanitation in the prison facility. Enhance food security by utilising treated water from the wetland for fish and crop production. Disseminate constructed wetlands technology for uptake by other stakeholders 	 Improved wastewater treatment Improved water quality of Mtwapa Creek Improved sanitation of Shimo La Tewa Prison Increased food production Shimo La Tewa Prison
7.	Strengthening regulatory framework and national capacity for monitoring effluent discharges, water, and sediments quality in coastal and marine areas of Madagascar	 Overall objective: To reduce degradation of the marine and coastal ecosystems in the River Betsiboka estuary and Bombetoka Bay). Improve the Ministry (MEEF) and its national capacity to effectively manage and regulate land-based sources of pollution and activities Increase existing national monitoring capacity to help implement and monitor effluent discharges and water and sediment quality in receiving coastal and marine environment 	 Regulatory framework and standards related to water quality and effluent discharges, prepared and tested within the Betsiboka estuary MEEF capacity to managing land-based source of pollution and activities in Boina region strengthened Monitoring framework for water quality and receiving environment is developed and implemented within the estuary's catchment in harmony with the regional framework

			• A decision support tool developed and tested by the MEEF within the Betsiboka estuary
8. Improve ecosyst water q implem to Sea b to tackle five price systems Kwazule Africa	ement of tem health and quality by henting a Source based approach le marine litter in ority river hs in Durban, lu-Natal, South	 Overall objective: To reduce the impacts of litter on the freshwater, coastal and marine environment and ecosystem health by implementing river basin wide interventions to recover land-based and riverine based litter Investigate areas of litter hotspots along each of the 5 priority rivers. Deploy litter recovery resources, including increased clean up efforts, to recover litter from the identified priority rivers. Monitor and characterise the types and quantities of litter collected in the 5 rivers. Identify and implement at least 1 waste management intervention. Undertake educational activities and awareness raising campaigns around litter prevention from land-based sources. Review pilot project interventions in the 5 priority rivers and hot spot areas for potential replication to other coastal areas. 	 Litter hot spot areas along each of the 5 priority rivers identified. Deployment and management plan for the 5 litter booms developed. Litter characterisation and microplastics prevalence reports for the priority rivers. One waste management intervention per hot spot community near each river. Outreach and awareness campaigns conducted







Part 2: 2ND Round concepts submitted for consideration under the WIOSAP call For Demo Projects

In this 2nd round, Tanzania and Mozambique National Implementation Committees (NICs) submitted their recommended concepts as explained below:

- Tanzania submitted 4 concepts: 2 on water quality (Tanzania Mainland and Zanzibar), one on mangroves and another on E-Flows
- Mozambique submitted 3 concepts: Two on critical habitats mangroves and seagrasses and a 3rd on alternative livelihoods (the 3rd is still under review)
- The 4 from Tanzania and 2 from Mozambique have undergone regional expert review and all received recommendation for full proposal development subject to proponents addressing comments, which have been raised by the experts.
- PMU now compiles a summary of the expert review comments as a basis for PSC consideration for virtual approval of the concepts for possible full proposal development.

	Concept Title	Objectives of proposed demo project	Expected Results
Cor	mponent A: Sustainable ma	nagement of critical habitats	
1.	Developing Collaborative Management Plan and Sustainable Mangrove Restoration Model in Rufiji Delta, Tanzania	 Overall Objective: Nurture sustainable co- existence of the coupled human-mangrove ecosystem in Rufiji Delta and provide demonstrated lesson for up-scaling To develop participatory mangrove ecosystem management plan for Rufiji Delta To develop and demonstrate different models of collaborative mangrove ecosystem restoration and sustainable utilization strategy in the Rufiji Delta 	 Land use, land cover change maps Analyzed and validated forest inventory data Developed mangrove ecosystem management plan for Rufiji Delta Produced sustainable selective harvesting guide for community monitoring and feedback Developed and approved by-laws to support implementation of the management plan
	Major comments	 The proposed interventions are two-fold – firstly secondly to set up the collaborative mangrove ec demonstrated the need for improved manageme Delta. Loss of mangroves has far reaching impa- wood products, reduction in fisheries, and increase 	to set up the mangrove management plan and cosystem restoration. The proponents have nt and governance of mangroves of Rufiji cts as indicated by shortages of mangrove sed shoreline erosion.







		 Some of the proposed actions, including develop income generation activities are not well articulat on the fact that participatory forest management strategy, integrated management and harvest pla Without proper understanding of 'participatory fo Same problems could have contributed partly to mangrove management plan of mainland Tanzar the key actors in mangrove management oriented. Thus, communication of the fact of the fact of the fact of the fact that part or the fact that participation of the fact that part of the fact the fact that part of the fact that part of the fact the fact that part of the fact the fact the fact that part of the fact the fact the fact the fact that part of the fact the	ment of harvest plans, establishment of ted in the proposal. This can be refined, basing plan (PFMP) incorporates both restoration ins. restry' the outcome will be difficult to achieve. failure of implementation of the national nia. There is need to see more participation of ania. The current action is more 'academic unity awareness and buy-in will be critical.
2.	Undertake seagrass restoration for Sustainable Shellfish and drafting a management Plan Action guideline for seagrass restoration (Mozambique)	 Overall Objective: To develop a management action plan for seagrass meadows based on concrete research questions that leads to demonstrative outcomes of sustainability of seagrass invertebrate fisheries, its value to the community wellbeing, To quantify the use value of seagrass meadows, Describe widely the role of this fishery in the wellbeing of the communities To undertake a rather wider seagrass restoration in an already seagrass-declined sites Management plan for seagrass meadows 	 Improved understanding of linkage/ relationship between seagrasses meadows and fisheries, Improved habitat management practices. Seagrass Management Action Plan
	Main comments	 This proposal has been well prepared, well laid of justified. Based on factual realities and situation ecosystems, with special respect to seagrasses support due to their vital importance for the propecosystem is recommended. Objectives will need to be sharpened and well lir combined. Need to specify how big an area will 	but, well documented, well-presented and al analysis of the present status of the coastal which need immediate attention, approval and ber functioning of the overall marine/coastal whed e.g. specific objectives 1 and 2 can be be restored.







		 However, since a regional seagrass restoration gunder to no need for another one to be developed under the to suit local situation. 	uideline is already being developed, there is e project but the former can be customized
3.	Mangrove Restoration and Livelihood Support through Community Participation in Limpopo River Estuary, Mozambique	 Overall Objective: The project overall objective is to improve mangrove management in Mozambique through restoration, community empowerment and generating baseline information to support decision making. To expand and monitor mangrove rehabilitation in Xai-Xai and Quelimane; To reinforce local existing structure and regulation for mangrove community-based management in Quelimane; To design mangrove local management plans for the two sites, promoting community-based management potentiating traditional sustainable uses and promoting good practices To create a community-based mangrove management structure at Quelimane; To conduct carbon inventories in natural, degraded and restored mangrove stands, creating baseline information for the incorporation of blue carbon in NDCs and implementation of a REDD+ project in the 2 sites 	50 to 100 ha of mangrove forest restored and/or replanted in each site A Natural Resources Management Committee is created in Quelimane Local management plan designed for all sites with community participation Mangrove change detection is conducted at all sites The amount of above and below ground biomass is known for the three sites in natural, degraded and restoring forests An assessment of carbon that is released to the atmosphere due to forest degradation is made
	Main Comments	 The applicants should be provided an opportunity to provision that the full 2.5 years be considered as we document. The project will have a major impact in mangrove row The applicants has also assessed weaknesses of success of this one. Of importance would be to assessed weaknesses of the success of th	to develop the proposal fully with the vell as the other action points provided in this restoration and management for these areas. previous projects that can assist in the ssess and quantify degraded mangrove areas







		 requiring restoration, causes of losses and degratincome generation activities for communities. Mozambique has the largest mangrove area in W concentrated in the central mangroves where the government of Mozambique is also in process of plan. It will be critical to align the current action w Mozambique. Part of these actions have been id while revising the proposal for the proponents to Kenya. Additionally, the area to be restored must wide range of "50 – 100 ha" 	dation of mangroves, and assess potential 'IO region. Most of these forests are proposed project is partly based. The developing national mangrove management with national priority regarding mangroves of entified in the proposal. It will be essential consult successful mangrove activities in be made more explicit instead of giving such a
Con	nnonent B: Water Quality		
4 .	Ipponent B: Water Quality Upscaling and Amplification of the Msingini Wastewater Treatment Facility Model in Chake Chake Town, Pemba (Zanzibar)	 Overall objective: To contribute to the protection and management of Pemba Channel Conservation Area (PECCA) coastal and marine ecosystem from discharge of untreated municipal wastewater with a view of improving the quality of coastal livelihoods and biodiversity. To provide an additional wastewater drainage capacity for Chake Chake Town Council to support the existing Mtoni-Msingini Wastewater Treatment Unit. To enhance effluent reduction measures (ERM) of the existing Mtoni-Msingini Wastewater Treatment Unit by reducing excess pollution load from land-based activities occurring in the upstream environment. To widen the wastewater treatments measures to through construction of amplified constructed wetland systems with more effective plant species that can enhance the ability to receiving more discharges from Chake Chake Town Council. 	 Enhanced treatment of Chake Chake Town Council wastewater discharge and conveyance using constructed wetland system, leading to reduction of pollution of the marine and coastal environment. Increased community health initiatives and public health awareness/education outreach on wastewater management issues leading to reduction in risk associated with waterborne diseases. Improved quality of coastal tourism and Chake Chake Bay fisheries activities, leading to increased sustainable livelihoods to the local communities. Strengthened collaborative and implementation know-how and capacity between institutional partners, e.g. DoE, ZEMA, ZAWA, and Chake Chake Town Council







		 To enhance the existing community health support initiatives, awareness, monitoring, associated with the implementation of the Mtoni-Msingini Wastewater Belt by upscaling public and spatial outreach.
	Main comments	 The problem which the proposal seeks to address and justification for the proposed intervention is well articulated. The need for effective municipal wastewater management to protect the marine environment from pollution was identified during the WIO-LAB project which culminated in a demonstration project at the same site. The concept is in line with the Zanzibar Strategic Growth and Poverty Reduction Strategy (MKUZA-III) and addresses the SDG14 Goal. The concept also relates to WIOSAP priorities The previous phase of the project is clear and it is understood that the demonstration project is for extending the existing capacity. However, there was a lack of information on the performance of the system given that it would be expected that a mixed storm water and sewerage system would have some particular challenges. An indication of the size and type of the existing treatment system would be beneficial for the concept evaluation. There will be need for assurance of commitment by key stakeholders to ensure successful implementation of the project
5.	Demonstrating and Implementing an Innovative, Appropriate, Cost Effective and Sustainable Municipal Wastewater Treatment Technologies in Tanga City, Tanzania	 Overall objective: To reduce stress of Tanga coastal and marine ecosystem from discharge of untreated, partially and inadequately treated municipal wastewater, sewage sludge and faecal sludge into Indian Ocean. Innovative, appropriate; cost effective and sustainable technologies (Settling thickening tank, drying beds, constructed wetland and briquettes unit) for the treatment and recycle/reuse of municipal wastewater and adaptation reviewed within 6 months of project; Design and construction of the Innovative, appropriate; cost effective and sustainable technologies (Settling thickening tank, drying Innovative, appropriate; cost effective and adaptation reviewed within 6 months of project; Design and construction of the Innovative, appropriate; cost effective and sustainable technologies (Settling thickening tank, drying Innovative, appropriate; cost effective and sustainable technologies for the treatment and recycle/reuse of municipal wastewater and adaptation reviewed within 6 months of project; Design and construction of the Innovative, appropriate; cost effective and sustainable technologies (Settling thickening tank, drying







		 beds, constructed wetland and briquettes unit) for the treatment and recycle/reuse of municipal wastewater in Tanga city within 12 months of the project; Innovative, appropriate; cost effective and sustainable technologies (Settling thickening tank, drying beds, constructed wetland and briquettes unit) for the treatment and recycle/reuse of municipal wastewater promoted to facilitate adoption to other 	
		identified pollution hot spots in Tanzania within	
	Main comments	 The background to the problem and justification of several policies and strategies at the national lev proposed project addresses the SDG14 and is in Local initiatives which will complement the proposed program (WSDP) by Tanga UWASA, to be funded which will ensure sustainability. In order to have an idea on what percentage of addresses the following information project then the following information population that will benefit from the project. The would have been useful. 	of the proposed intervention is well articulated. el backing the initiative are identified. The line with priority areas of the WIOSAP project. osal include the Water Sector Development by the Government under World Bank support, ctual problem will be tackled in the tion would have been useful: The size of the expected volume of waste water to be treated
Con	nponent C: River Flows		
6.	Sustainable Catchment Management through Enhanced Environmental Flow Assessment and Implementation for the protection of the Western Indian Ocean from land-based sources and activities in Tanzania.	 Overall objective: To reduce impacts/stress from land-based sources and activities and sustainably manage critical coastal-riverine ecosystems through Environmental Flow Assessment and implementation with the support of partnerships at national and regional levels. To enhance Capacity for Environmental Flow Assessment and Restoration for Sustainable Water Flows 	 Suitable EFA methods for use by specific catchments and DST guidelines customized for use; EFA guidelines effectively operationalized, monitored and evaluated







	 To conduct Environmental Flow Assessments in pilot river catchments to guide sustainable management of water flows Implementation of recommended flows for sustainable water resources management
Main comments	 The objectives are clear and well aligned with the problem statement. The project has a land-use sediment focus, with an application in environmental flows and the determination of ecosystem services/benefits that can flow from it. The concept as presented is compelling, key considerations such as involvement of key stakeholders and proposed activities demonstrate a sound understanding of the problem, and the appreciation of the cross disciplinary nature of the issues being addressed. However, it will be good to clarify the spatial scale of the study, i.e. specify it is just the upper part of the basin or all the way to the coast. The project motivation refers to the benefits to the coastal environment and evaluating these benefits, but these are potentially not part of the project scope. Alignment to the WIOLAB SAP/Background document to the call for concepts is important. Implementations of E-Flow recommendations for improved water quality and quantity will need to be elaborated on.

PMU request to PSC

- The PMU requests for virtual approval consideration of the concepts by the PSC to facilitate progress to full proposal development stage as appropriate.