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CONCEPT NOTE FOR SESSION III ON VALIDATION OF THE WIOSAP GUIDELINES

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Concept Paper on Session III A: WIOSAP - Discussion on project guidelines and toolkits

1.0 Background

The Contracting Parties to the Nairobi Convention have received funding from the Global Environment Facility (GEF) to implement a Programme entitled '*Implementation of the Strategic Action Programme for the protection of the Western Indian Ocean from land-based sources and activities*' (WIOSAP). The 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 WIOSAP Project is largely based on the WIO-LaB Strategic Action Programme (SAP) for the protection of the WIO Region from land-based sources and activities that was developed as part of the UNEP-GEF WIO-LaB Programme that was implemented in the WIO Region in the period 2004-2010. The WIOSAP Project is thus a response to a request made by the Contracting Parties to the Nairobi Convention and it presents an opportunity to the governments in the region and their conservation partners to jointly implement strategies of protecting the coastal and marine ecosystems from land-based sources and activities to provide essential goods and services on sustainable basis.

The Project is implemented and executed through a 'Partnerships Approach' with the Nairobi Convention Secretariat being the Executing Agency. The participating countries include Comoros, Madagascar, Mauritius, Seychelles, Mozambique, Kenya, Tanzania, Somalia and South Africa.

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

2.0 WIOSAP Mode of Implementation

Covering the four Components, demonstration projects financed *through a competitive Call for Proposals scheme* will be implemented with the objective of reducing stress from land-based sources and activities in the WIO. It is anticipated that the sum of the learning derived from these projects will be significantly enhanced if the projects within each component share standardised approaches to their design and implementation, to subsequent analyses and to the reporting of results. To facilitate this, a set of Guidelines/Toolkits are being developed to be made available to project implementation teams. The following Guidelines are currently under development:

1. Methodologies for the Valuation of Coastal & Marine Ecosystems (VCME)
2. Mangrove Ecosystem Restoration Guideline
3. Seagrass Ecosystem Restoration Guideline
4. E-Flows Assessment Guideline
5. Climate Change Vulnerability Assessment (CCVA) Toolkit

The Guidelines/Toolkits capture will capture respective WIO specific case studies on how the various interventions have worked and lessons learnt. Where useful examples from the WIO are not available the Consultants may draw on experiences from elsewhere.

3.0 The Process

Although the need for the Guidelines was already identified and captured in the WIOSAP Prodoc, this was reiterated during the Focal Points meeting held at Nosy Be Madagascar in April 2018. The Project Steering Committee (PSC) approved the development of the indicated Guidelines during its 2nd sitting in August 2018 in Mombasa, Kenya. The PMU then proceeded to develop respective TORs for the Guidelines, widely advertised the same globally and consultants competitively recruited to work with experts in respective Regional Task Forces of the WIOSAP Project to facilitate the development of the said Guidelines. Progress on the Guidelines was presented to Project Focal Points and regional experts during the Joint WIOSAP and SAPPHIRE Focal Points meeting held in Maputo, Mozambique in December 2018. The Regional Task Force members have been appointed by their respective governments taking into account their professional expertise in line with the Components of the WIOSAP Project to among other roles ensure quality assurance of project outputs. The consultants have been working in consultation with Regional Task Forces at various stages of the Guidelines development process.

The consultants have submitted the 1st Drafts of the respective Guidelines/Toolkits, which will be discussed and input given by policy makers and experts under Session IIIA at the WIO Science to Policy Meeting. Consultants will then subsequently incorporate the comments given and prepare advanced Drafts which will be presented to countries for validation. Completed Guidelines/Toolkits approved by PSC will be availed to project

proponents implementing demonstration projects to ensure a harmonized and systematic approach in executing relevant activities.

4.0 Objectives of the session

The main objective of the session will be to validate the Guidelines currently under development in readiness for implementation of demo projects. The specific objectives will be to:

1. Ensure regional expert into the draft guidelines so that they address the operational context
2. Ensure policy linkages of the guidelines as appropriate

5.0 Expected outputs

1. Input into the draft project Guidelines by policy makers and experts.
2. Validated draft Guidelines
3. Agreed process on finalization of the Guidelines

Annex 1: Proposed structure of the Guidelines

The following is the structure of the different Guidelines/Toolkits under development

a. Methodologies for the Valuation of Coastal & Marine Ecosystems (VCME)

1. Introduction
   - 1.1 Who are these guidelines for?
   - 1.2 How to use the guidelines

2. Understanding the Basics - What are we seeking to value and why?
   - 2.1 Ecosystem Functions (e.g. to cover production, regulation, habitat)
   - 2.2 Ecosystem Services (e.g. provisioning, regulating, habitat, cultural)
   - 2.3 The case for ecosystem valuation

3. Ecosystem Valuation Methods
   - 3.1 Primary valuation methods (e.g. preference-based valuation, production-based valuation, cost-based valuation)
   - 3.2 Value (benefits) transfer methods
   - 3.3 Social valuation methods (e.g. deliberative valuation, time-use assessment, photo-elicitation, narrative assessment)
   - 3.4 Comparison of methods: (e.g. pros & cons, relative difficulty, required expertise and resources)
   - 3.5 Important considerations: (e.g. equity and distribution of values, discounting, double-counting, uncertainty)

4. Preparing for the Valuation
   - 4.1 Stakeholder engagement to define mandate and the demand for a valuation
   - 4.2 Stakeholder engagement to identify key ecosystem services and beneficiaries
   - 4.3 Review of existing studies, information and data
   - 4.4 Defining objectives and selecting methods
   - 4.5 Building a team with all required competencies

5. Undertaking the Valuation
   - 5.1 Description of the target ecosystem
   - 5.2 Survey and sampling methods

5.3 Options for participatory analyses
5.4 Developing scenarios
5.5 Employing decision-support tools

6. Employing the Outputs of Ecosystem Valuations
   6.1 Design of valuation products and communication strategies
   6.2 Influencing policies and strategies
   6.3 Management, regulation, and planning
   6.4 Market-based instruments

7. Glossary of terms
8. Acronyms
9. Annex I: Other useful manuals and guidelines (e.g. UNEP guidelines on value transfer; GEF guidelines on economic valuation of ecosystem services; MACBIO manual on valuing coastal and marine ecosystem services; TEEB guidance for country studies; UNEP guidance manual on valuation and accounting in SIDS, ValuES etc.
10. Annex II: Value databases (e.g. Ecosystem Services Valuation Database; Environmental Valuation Reference Inventory etc.)
11. Annex III: Terms of Reference (ToR) template for commissioning a valuation study

b. Mangrove Ecosystem Restoration Guideline (Seagrass Restoration Guideline follows a similar structure)

1. Understanding the Basics - A foundation in Mangrove Ecosystems:
   a. Understanding Mangrove Ecosystem Function;
   b. Zonation & Geomorphology;
   c. Mangrove distribution in WIO;
   d. Mangroves & Climate Change.

2. Mangrove Restoration - What is it and when to use it:
   a. When is mangrove restoration necessary;
   b. Restoration approaches;
   c. Restoration as part of integrated mangrove management;
   d. Identifying & reversing drivers of local mangrove decline;
   e. Critical factors for restoration success.

3. Restoration Site Identification - Where and when:
   a. Criteria & Issues for Site Selection (e.g. checklist);
   b. Site description variables:
      i. Hydrological classification;
      ii. Soil Surveys;
      iii. Existing mangrove community structure, etc;
   c. Understanding the institutional & legal context of potential restoration sites.

4. Principles of Best Practice - A Restoration Protocol:
   a. Elements of a restoration plan;
   b. Community/public participation;
   c. Choice of species;
   d. Nursery Basics;
   e. Site preparation;
   f. Plantation establishment & indicative work schedule;

g. A restoration maintenance programme (weed control, growth measurements, gap filling, hydrological maintenance etc.);
h. Budgeting: What does it cost under different conditions;
i. How it has worked, lessons learnt and recommendations.

5. Is Restoration Working? Implementing a systematic monitoring plan:
    a. Linking Programme objectives and monitoring;
    b. Indicators of success & necessary data;
    c. Sampling protocols;
    d. Silvicultural management;
    e. Ecosystem services assessment;
    f. How it has worked, lessons learnt and recommendations.

6. Developing a Mangrove Restoration Management Plan (MRMP):
    a. Planning principles & policies;
    b. A MRMP Checklist;
    c. Implementing mitigation measures (to ensure the same drivers of change don't persist);
    d. Communication strategies.

7. Speaking the same language - A Glossary of terms.

Appendix 1: Key Methods for Site Assessment:
i. Social Survey Questionnaire (incl. drivers of mangrove loss; political context to restoration etc.);
ii. Vegetation Survey (species; basal area; complexity index etc.);
iii. Soil Analysis (e.g. Redox potential, Ph; SBD; Salinity etc.);
iv. Any other….

Appendix 2: Some worked examples of best practice analyses:
i. Survival rates;
ii. Growth rates;
iii. Correlation analyses (e.g. environmental parameters vs survival rate).

Appendix 3: Further Information:
i. A checklist of monitoring equipment and approximate costs;
ii. Sources of mangrove restoration expertise.

c. E-Flows Assessment Guideline
Chapter 1: Introduction
1.1 Purpose and role of the guideline
1.2 Layout of the guideline document
1.3 Definitions

Chapter 2: The flow of water, sediments and biota
2.1 River ecosystems
2.2 Estuary ecosystems
2.3 Marine ecosystems

Chapter 3: The effects of land-based development on river, estuary and marine ecosystems
3.1 The case for an integrated river basin management approach

Chapter 4: An introduction to eflows
4.1 The nature of eflows
4.2 Climate change and eflows

Chapter 5: An introduction to eflows assessment methods
5.1 History of development of eflows assessment methods
5.2 Commonly used eflows assessment methods
5.3 For three types of assessment methods:
5.3.1 Information needed for eflows assessments
5.3.2 Information provided by eflows assessments
5.4 Managing data limitations

Chapter 6: Eflows in the WIO region
6.1 Eflows assessments in the WIO region
6.2 Trends in eflows assessments in southern and eastern Africa, with an emphasis on WIO countries.
6.3 Capacity for undertaking eflows assessments in the WIO region

Chapter 7: Eflows assessments for the WIOSAP project
7.1 Purpose of eflows assessments for the WIOSAP project
7.2 Available data and information in WIOSAP region
7.3 Selection of applicable methods

8. Eflows assessments for WIOSAP project (– see section 2)
8.1Uundertaking an eflows assessment
8.2 Data analysis and presentation
8.3 Involving stakeholders
8.4 Budgets and timelines
8.5 Dissemination of results
8.6 Monitoring programmes

9. Building capacity in eflows
9.1 Kinds of capacity needed to assess eflows and make use to eflows outputs
9.2 Building capacity through choice of methods
9.3 Universities and research organisations
9.4 Eflows information systems
9.5 Communication strategy for mainstream uptake of eflows results.

d. Climate Change Vulnerability Assessment (CCVA) Toolkit
Chapter 1 will introduce climate change and climate change vulnerability. The chapter will discuss climate change vulnerability and different concepts, school of thoughts on interpretation, and framework. The chapter will also include definition of the key terminologies and the future predictions of climate and climate and change scenarios.

Chapter 2 will present the indicators of climate and of the different dimensions of vulnerability. This chapter involves analytical work to derive spatial patterns of key indicators in the region, which can be applied for CCVA. These include climate change indicators, coastal geomorphology, ecosystems, and socioeconomics and governance indicators.

Chapter 3 will evaluate the role of CCVA in climate change mitigation efforts, including achieving targets outlined in relevant sustainable development goals (SDGs) and the Sendai framework for disaster risk reduction.

Chapter 4 will describe CCVA prerequisites, key steps and approaches. The three dimensions of CCVA, namely exposure, adaptive capacity and sensitivity are described in detail. The methods for synthesizing these dimensions into a CCVA, the operationalization and mainstreaming of CCVA will also be discussed in this chapter.

Chapter 5 will explore examples of CCVA's (and/or dimensions of climate change vulnerability) of the marine and coastal socioecological systems that have been conducted within the WIO region. Examples are primarily based on peer reviewed articles on vulnerability of coral reef fisheries socioecological systems.

Chapter 6 will discuss the specific methods for CCVA, including desktop vs field based, stakeholder consultations and workshops, and the analyses of qualitative and quantitative data.

Chapter 7 will discuss the dissemination and communication of CCVA outputs to key stake holders. The outputs of CCVA are typically maps with values between 0-1, where 0 indicates low vulnerability and 1 high vulnerability, or a classified map with gradations of vulnerability (i.e. low moderate, high). A guidance on how CCVA could be best be presented is provided.

Supplementary information/annexes will include the case studies for coral reefs and mangroves vulnerability assessments.