

TERMS OF REFERENCE – INDIVIDUAL CONSULTANCY

Conduct an assessment to determine the impact of plastics and microplastics pollution on Aquatic Biodiversity and Environment and to develop a Continental Strategy for the control and mitigation of plastics and microplastics pollution on Aquatic Biodiversity and Environment in Africa.

Background

The Africa Blue Economy Strategy was endorsed at the highest political level of the continent. The Strategy identified five clustered thematic areas that are deemed critical for promoting sustainable blue economy development in Africa, as outlined below:

1. Fisheries, aquaculture, conservation and sustainable aquatic ecosystems;
2. Shipping/transportation, trade, ports, maritime security, safety and enforcement;
3. Coastal and maritime tourism, climate change, resilience, marine ecosystem, environment, infrastructure;
4. Sustainable energy and mineral resources and innovative industries; and,
5. Policies, institutional and governance, employment, job creation and poverty eradication, innovative financing.

The objective of the Africa Blue Economy Strategy (ABES) is to guide the development of an inclusive and sustainable blue economy that becomes a significant contributor to continental transformation and growth, through advancing knowledge on marine and aquatic biotechnology, environmental sustainability, marine ecosystem utilization, management and conservation and carbon sequestration, the growth of an Africa-wide shipping industry, the development of sea, river and lake transport, the management of fishing activities on these aquatic spaces, and the exploitation and beneficiation of deep sea mineral and other marine resources.

The African continent is adjacent to some of the highly productive marine ecosystems that include the seven African Large Marine Ecosystems (LMEs) viz., Agulhas Current LME, Benguela Current LME, Guinea Current LME, Canary current LME, Mediterranean Sea LME, Red Sea LME and Somali Current LME. These African marine ecosystems inhabit living and non-living resources; however, the unsustainable exploitation and environmental practices of these resources are threatening the biodiversity, resources and environmental sustainability. Several factors are threatening aquatic biodiversity in Africa marine ecosystems: these include overexploitation of aquatic living species (commercially important fish species in particular); pollution from several sources (land-based municipal, agricultural activities, shoreline activities); dumping of toxic wastes; plastic pollutions; mining activities, gas exploration; tourism development etc. Consequently, important aquatic resources are becoming increasingly susceptible to both natural and artificial environmental changes. Thus, conservation strategies to protect and conserve aquatic

life are necessary to maintain the balance of nature and support the availability of resources for future generations.

Therefore, AU-IBAR, with support from the Swedish International Development Cooperation Agency (SIDA), is implementing a 3-year project on ‘Conserving Aquatic Biodiversity in African Blue Economy’, whose overall objective is to enhance the policy environment, regulatory frameworks and institutional capacities of AU member states and regional economic communities to sustainably utilize and conserve aquatic biodiversity and ecosystems. The specific objectives of the project are as follows:

1. Ratify and/or align relevant international/regional instruments related to blue economy themes (with specific reference to protecting and conserving biodiversity);
2. Optimizing conservation and sustainable use of biodiversity while minimizing conflicts among blue economy sub-themes;
3. Strengthening measures for mitigating the negative impacts of coastal and marine tourism, oil, gas, deep sea mining and climate change on aquatic biodiversity and environment; and,
4. Strengthening gender inclusivity in aquatic biodiversity conservation and environmental management.

Rationale

Plastic pollution is one of the common manmade threats to aquatic biodiversity, others include: ocean warming and acidification, overharvesting of important fish stocks, eutrophication, deoxygenation, shipping and underwater noise, invasive species, habitat destruction and fragmentation, as well as other forms of chemical pollution. The UN calls it a ‘planetary crisis’ ranging from the poles to the remotest islands, from the surface of the sea to the deepest ocean trench, the marine plastic pollution problem has grown exponentially, and is now ubiquitous and is projected to increase even if current corporate and government commitments are met.

Plastic pollution is a global issue affecting the seafood industry and is quickly becoming one of the most widely acknowledged environmental problems of the century. Large items of plastic can impact fishery by entangling marine mammals and fish causing starvation, injury; and because they’re entangled and cannot escape, the fish species become vulnerable to predators. Discarded fishing nets, including monofilament nylon nettings that are not biodegradable, can also smother and break coral reefs, preventing healthy growth. Besides entanglement, impacts of plastic on marine life also include suffocation due to ingestion and starvation due to confinement. The discovery of microplastic in fish and throughout the marine food chain has also led to concerns about the consumption of seafood by humans. Thus, plastic pollution has implication for the fisheries sector and fish export. Africa presently import about USD 7 billion dollars’ worth of fish to various destinations in the world, resulting in foreign exchange earnings for the continent. Imposing fish import bans, due to food safety reasons, by lucrative markets, would have serious implications for African countries.

The current fish production in Africa is estimated at 12 million tons of fish annually, contributing significantly to food and nutrition security, livelihoods and wealth creation. Over 200 million in the continent derive their livelihoods from the sector and contribute to about 10 kg per capita fish contribution. The sector provides about 12 million direct employment. Maintaining the current benefits or sustainably increasing the current benefits would require necessary measures, including strengthening capacity to deter unsustainable practices, including IUU fishing, combating pollution, such as plastic pollutions.

Where is all this plastic in the world's oceans coming from? Many of the sources are known, but not all of them. The rise of single-use items is a major factor; for instance, in 2015, half of all plastic waste was from packaging alone, while according to a 2018 estimate, single-use plastics account for 60-95% of global marine plastic pollution. Similarly, land-based sources near coastlines and rivers further inland contribute the large majority of marine plastic pollution. But there are also significant marine based sources, with one study estimating that at least 22% of marine litter comes from fisheries. The fishing and aquaculture industries are major contributors, contributing to tonnes of plastics from fishing gear entering the ocean each year. The air, too, is a vector for plastic pollution; wear of vehicle tyres and brakes are a major source of microplastic emissions, as is wind abrasion from plastic-coated surfaces, waste processing, roads and agriculture.

A rising tide of plastic waste is choking our oceans, threatening fragile ecosystems and killing sea life. Reviews are stating that, by 2050, there will be more plastic than fish in the world's oceans and African marine ecosystems would not be spared. Plastic production is expected to more than double by 2040 and plastic pollution in the ocean is expected to triple. This could lead to a four-fold increase in oceanic macroplastic concentrations by 2050, and an alarming 50-fold increase in oceanic microplastics by 2100.

In Africa, just like other global aquatic systems the main negative impacts of plastics are: entanglement, ingestion, colonization, contact/coverage, smothering, and chemical pollution with far reaching effects such as behaviour change, breathing issues, dispersal, injuries, mortality, food consumption, growth, physiological change, reproduction, toxicity, translocation and genetic modifications just to mention a few. Similar to the climate crisis, plastic pollution affects the entire planet and its levels are continuously increasing, and only global and systemic solutions will succeed in response. Encouragingly, public attention is now focused on the issue, and calls are growing for decisive international action to turn the tide before plastic pollution overwhelms the resilience of a critical number of marine species and ecosystems. One solution that is often proposed is the collection and removal of plastic pollution from the ocean.

The African Blue Economy Strategy identified Fisheries, aquaculture, Ecosystems conservation as well as environmental sustainability as key thematic areas to address for sustainable blue economy development. The Strategy noted that Pollution through dumping of toxic wastes as well as indiscriminate discarding of single use plastics and environmental randomness also undermine the realization of Africa's Blue Economy Growth and acknowledged that local communities' participation in coastal and marine tourism, is essential to protection of the marine environment for example, beach cleaning, collection of plastics to conserve marine ecosystem/biodiversity, recycling for small business enterprises.

In the course of implementing the SIDA funded 'Conserving aquatic biodiversity in African Blue Economy project', and against the background of potential impact of plastic pollution on seafood industry, economies and humans, stakeholders have severally recommended and urged AU-IBAR to develop a continental strategy for abating plastic and microplastic pollutions and mitigating the impact on aquatic biodiversity, including fish stocks, and aquatic ecosystems.

Therefore, with respect to the above and considering the magnitude of threats posed by plastic waste in African aquatic ecosystems, AU-IBAR, with support from Swedish International Development Cooperation Agency (SIDA), seeks to undertake studies on plastic waste pollution and develop continental Integrated strategy for the control and mitigation of Plastic and Microplastic Pollution towards conserving aquatic biodiversity and ecosystems in Africa.

Objective

The overall objective of this consultancy is to conduct an assessment on plastics and microplastics pollutions in African aquatic ecosystems and develop a continental strategy for the Control and Mitigation of Plastic and Microplastic Pollution towards conserving aquatic biodiversity and ecosystems in Africa.

Detailed Tasks

1. Liaise with the relevant staffs at AU-IBAR for adequate briefing and clarification of tasks;
2. Prepare inception report within 7 days of signature to the contract outlining the methodology and approach for undertaking the assignment, outline of the strategy/report, detailed work plan, deliverables based on the indicated timelines and comments on the Terms of Reference if any (in brief);
3. Review existing literature (including policies and institutional frameworks and governance arrangement) on plastic pollution in Africa
4. Identify the different types of marine waste or debris (by cluster groups) in the African aquatic systems,
5. Document various sources of plastic wastes into aquatic environments (freshwater and marine) and identify plastic waste hotspots in African aquatic systems,

6. Document the impacts and consequent effects of plastics pollution in the aquatic systems, the biodiversity, including fish stocks, humans, trade, socio-economic development in Africa etc.
7. Identify and document lessons and best practices on existing measures on the continent to combat plastic measures, policies and regulatory framework, management of plastic pollution and international best practices,
8. Conduct an assessment of existing plastic policies, regulatory and institutional frameworks in Africa (including a SWOT analysis) and identify impacts, gaps for possible intervention
9. Identify priority actions for abating plastic pollutions in African aquatic ecosystems and mitigating the impact of aquatic biodiversity and environment
10. Develop a Continental Strategy for The Control and Mitigation of Plastic and Microplastic Pollution towards Aquatic Biodiversity and Environment in Africa.
11. Develop comprehensive narrative report at the end of assignment.

Deliverables

1. Inception report: A draft version detailing the methodology, approach and work plan for delivery of the outputs to be used to undertake the consultancy within 7 days of signing the contract. The draft report should demonstrate a clear understanding of the assignment by the consultant and show a detailed outline of the strategy/report
2. Draft Continental Strategy for Control and Mitigation of Plastic and Microplastic Pollution towards Aquatic Biodiversity and Environment in Africa. Submitted within 25 days from signature of the contract.
3. The Final Continental Strategy (submitted within 50 days from signature of contract) for The Control and Mitigation of Plastic and Microplastic Pollution towards Aquatic Biodiversity and Environment in Africa (after inputs from stakeholders): the strategy should incorporate, among others,
 - i. Theoretical underpinning
 - ii. process involved in formulation
 - iii. vision and purpose,
 - iv. strategic objectives and priority actions
 - v. Underlying principles
 - vi. role of stakeholders in implementation **etc**
4. A narrative report (submitted within 75 days of signature of the contract) on the study at the end of assignment outlining the following:
 - a) Different types of marine waste or debris and their associated sources in the African aquatic systems,
 - b) Plastic pollution hotspots in African aquatic ecosystems

- c) Impacts and consequent effects of plastic pollution in the aquatic biodiversity and environment
 - d) Plastic pollution policies, policy issues and challenges in plastics waste recycling and governance in Africa based on best international practices,
 - e) Impacts and Gaps of existing plastic policy in Africa that needs to be addressed in the management of plastic waste
 - f) Identify and document lessons and best practices of existing measures on the continent to combat plastic measures, policies, regulatory and institutional frameworks, management of plastic pollution
5. Popular version also known as executive summary of the strategy (not more than 20 pages) – submitted within 80 days from signature of contract;
 6. Facilitate the stakeholder’s workshops for validation and enrichment of the continental strategy (completed within 90 days from signature of the contract)

Requirements:

Qualifications

The successful candidate should have an advanced degree in disciplines related to Aquatic and Environmental Sciences, Marine ecology and aquatic conservation biology, and Fisheries sciences. A PhD degree will be an added advantage.

Experience

General Experience

1. Familiarization with national and regional institutions with mandates in fisheries, aquaculture, aquatic biodiversity conservation and environmental management.
2. Familiarization with functions of regional economic communities and specialized regional institutions with mandates in fisheries, aquaculture, aquatic biodiversity and environmental protection.
3. Knowledge of African Union Instruments relating to plastic(s)/ pollutions, aquatic biodiversity conservation and environmental management advancing attainment of sustainable blue economy in the continent.
4. Knowledge and experience of governance issues in Africa large marine ecosystems and freshwater ecosystems, management systems, transboundary issues, challenges and opportunities.
5. Evidence of working experience with multiple stakeholders across a wide range of disciplines in fisheries, aquaculture, aquatic biodiversity conservation and environmental management and in facilitating stakeholders’ consultative workshops on the continent

Specific Experience

1. Demonstrated experience of formulating policies and strategies relating to fisheries, aquaculture, aquatic biodiversity conservation and environmental management
2. At least 7 years working experience in research and development related institutions and of conducting research, assessment towards conservation of aquatic ecosystems and environmental protection.
3. Knowledge of global instruments and frameworks related to plastic(s) pollutions, aquatic biodiversity conservation and environmental management.
4. Demonstrated evidence of performing similar tasks related to this consultancy in the last 5 years.
5. Record experience in working with governments and partners on governance issues related to the subject matter in Africa for conservation of aquatic ecosystems and environments.

Other Essential Skills and Experience

1. Diplomacy and good interactive skills necessary for dealing with senior officials in Government, RECs, other regional organizations, and donor/development organizations in Africa;
2. Good networking skills and ability to maintain positive and constructive;
3. Very strong writing, analytical and communication skills are necessary;
4. Proficiency in at least 2 AU languages.

Evaluation & Award Criteria

The applications will be evaluated on the basis of the relevant technical qualifications, experience and competence of the candidates.

Applications received will be reviewed on the basis of the criteria below:

Criteria for Scores:

| Criteria | Scores (%) |
|--|-------------------|
| Qualifications | 15 |
| General Experience | 25 |
| Specific Experience | 50 |
| Other skills | 5 |
| Proficiency in at least 2 AU languages | 5 |
| Total | 100 |

Gender Mainstreaming

The AU Commission is an equal opportunity employer and qualified women are strongly encouraged to apply.

Duty Station

This consultancy will be home-based.

Duration

The duration of this assignment is 90 days from the date of signature of the contract.

Remuneration

The professional fee for this consultancy is **USD 9,000** (Nine Thousand United States Dollars). Expenses for missions will be covered separately in accordance with the applicable African Union Commission rules and regulations. No other payment will be made in respect of this consultancy

Supervision and Reporting

The candidate will be under the direct supervision of the project team leader with oversight supervision by the Director of AU-IBAR. The team leader will have the responsibility of approval of reports.

5. Submission of Applications

Applications should be submitted through email to: procurement@au-ibar.org with a copy to albert.obiero@au-ibar.org and should include the title **"Impact of Plastics and Micro plastics Pollution on Aquatic Biodiversity and Environment"** in the subject of the email.

Applications Should Include the Following:

- i. Detailed curriculum vitae (CV) and brief cover letter.*
- ii. Copies of academic and professional certification documents.*
- iii. Proposed methodology and approach for the assignment (workplan).*
- iv. Declaration on exclusion criteria (see format attached).*
- v. Identification documents.*

A Personal Data Protection and Privacy Statement is attached as information for the applicants.

Application Deadline

Applications should be submitted to the address given above by **17:00hrs, 29th November, 2024, Nairobi Local Time.**