BIOFIN
The Biodiversity Finance Initiative

# BIODIVERSITY FINANCE PLAN (BFP)
# ZANZIBAR, TANZANIA
## 2022 – 2026

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The Biodiversity Finance Plan (BFP) is the final report as the fourth component of Biodiversity Finance Initiative (BIOFIN) for the Republic Government of Zanzibar (RGoZ). It is the product of many and diverse inputs provided by key stakeholders and experts to all four BIOFIN components: Policy and Institutional Review (PIR), Biodiversity Expenditure Review (BER), Finance Need Assessment (FNA) and the BFP itself.

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# EXECUTIVE SUMMARY

Zanzibar is an archipelagic state within the United Republic of Tanzania (URT) consisting of Unguja and Pemba islands and 53 other small islets, with surface area of 2,654 km2 whereas the URT has a total area of 945,800 km2. Its current human population is 1,889,773 (male = 915,492; Female=974,281) with growth rate (2012 – 2022) of 3.7. It is highly endowed with high biodiversity in marine, coastal, mangroves and terrestrial ecosystems. The Government recognizes the broad contribution of biodiversity to the national economy and social wellbeing of its people. This has made the government to undertake significant efforts to conserve its biodiversity in different ecosystems. Currently, almost 80% of its total surface area is under conservation due to the political commitment placed on biodiversity. The commitments are well reflected in biodiversity-related policies, legal frameworks, and strategies (Zanzibar Development Vision 2050, Blue Economy, natural resources sectoral policies and the planned Zanzibar Biodiversity Conservation Strategy and Action Plan (ZABSAP) and Zanzibar National Investment Guide of 2022). Nonetheless, financial resources to manage and conserve the biodiversity sustainably are inadequate. To reduce the financial gaps, Biodiversity Finance Initiative (BIOFIN) was piloted in Zanzibar, an autonomous part of the United Republic of Tanzania (URT), in 2018 to develop the Biodiversity Finance Plan (BFP) as a key tool for effective biodiversity financing. The Republic Government of Zanzibar (RGoZ) and the URT at large are participating in BIOFIN Phase II for the period of 2018-2026.

This BFP report is the fourth and core component of the BIOFIN. It has been formulated through a rigorous methodological approach provided in the BIOFIN WorkBook of 2018 components. Key issues, findings and recommendations that formed the main basis for the BFP were drawn from: Policy and Institutional Review (PIR), Biodiversity Expenditure Review (BER) and Finance Need Assessment (FNA). The BFP presents a coherent and comprehensive approaches for mobilizing additional financial resources for biodiversity conservation. It guides on the implementation of prioritized finance solutions (FSs) in the next 5 years.

The keys steps followed the consultative methodological approach and techniques provided in the BIOFIN WorkBook of 2018. Participants to consultative workshops to identify, screen and prioritize biodiversity finance solutions (FSs) came from: the President's Office- Finance and Planning (PO-FP), Zanzibar Planning Commission, Ministry of Blue Economy & Fisheries, Ministry of Agriculture Natural Resources and Livestock, Department of Forestry & Non-Renewable Natural Resources, Division of Environment, Zanzibar Environment Management Authority, Zanzibar Water Authority, Department of Environment, Department of Marine Conservation (DMC), and the First Vice President's Office. The private sector and the Civil Society Organizations (CSOs) were also consulted. The process from the preliminary listing of 47 FSs that were subjected to rapid and the detailed screening steps generated the final list of 13 prioritized FSs.

1. Crowdfunding for restoration of degraded key forests and/mangroves in selected Community Forest Management Areas (CoFMAs)
2. Establish Payment for Ecosystem Services (PES) Programme for CoFMAs and other forests generating significant water ecosystem service
3. Repurposively "Bluing" subsidies in the fisheries sector
4. Establish and operationalize public-private partnership framework for "Re-greening Zanzibar Program" (coastal and inland areas)
5. Repurposing subsidies for sustainable seaweed farming
6. Secure Debt-for-nature swaps for sustainable BLUE economy (coral reefs restoration)
7. Establish Blue Fund for BLUE Economy implementation
8. Establish crowdfunding for restoration of degraded coastal and beach areas
9. Identify and develop a new program for scaling up of REDD+ initiatives
10. Introduce subsidies for clean energy sources (gas and electricity) for household energy
11. Increase Corporate social responsibility (CSR) contributions from the private sector for biodiversity conservation
12. Reform tourist's entrance fee structure for protected areas and adopt a Digital Voucher System for the fees collection
13. Review and strengthen the revenue retention framework/Scheme for the PAs (MCAs).

The prioritized FSs were well linked with AICHI Targets, and Zanzibar biodiversity Targets and strategies including Blue Economy implementation strategies and climate Fund thematic areas. Each FSs would generate one or more of four finance results; i) generating revenues, ii) realigns expenditures for biodiversity conservation, iii) enhancing to deliver, and/or iv) enhancing avoidance of future expenditures. The prioritized FS are described in detail in chapter covering the key parts provided in the BIOFIN WorkBook of 2018: context, objectives, expected financial results, and an action plan with estimate budget for the establishment and implementation, Key steps, actors and milestones. Below are summaries of the prioritized FSs that will be implemented:

## A. Ministry of Blue Economy and Fisheries (MoBE&F)

### *1. Establishing and implementing Blue Fund for Blue Economy*

Blue Economy, like other sectors in Zanzibar face a significant inadequate finance resources for biodiversity conservation in the coastal and marine ecosystems. The Fs aims to mobilize the required finance resources and reliable funding sources for biodiversity conservation. Its implementation is anchored on the Blue Economy Policy of 2020, the Blue economy implementation strategies, operational and funding modalities to be developed. The multilateral institutions, agreements with partners, guidelines and M & E frameworks will also enhance the implementations. The key steps will include; feasibility study, implementation proposal, operationalization and M & E. The Fund is expected to generate additional finance resources, encourage better spending and possible realignment of biodiversity expenditures, realizing significant positive impact on biodiversity.

### *2. Repurposing subsidies in the fisheries sub-sector*

Over 90 percent of the fisheries production in Zanzibar is artisanal, conducted in the shallow waters, using traditional fishing gears and facilities that are threatening marine biodiversity. To reduce the pressure, re-designed subsidies are needed to ensure sustainable fisheries in both shallow waters and high sea zones. The FS aims to review the framework related to subsidies in the fisheries industry and re-design those potentially harmful to biodiversity to ensure sustainability. Existing legislative and regulatory instruments that guide deep sea fishing, and the international collaborations in prohibiting certain forms of fisheries subsidies provide conducive environment for its implementations. The main steps will include; a detailed assessment of subsidies, review of frameworks, implementation proposal, re-designing, implementations, M&E framework. The FS would avoid future biodiversity expenditure due to over-fishing and enhancing additional finance resources for attaining sustainable fisheries development.

### *3. Repurposing subsidies for sustainable seaweed farming*

Seaweed farming is one of the main incomes generating activities (IGAs) promoted in Zanzibar. Unharmful subsidies are needed to support sustainable practices. The FS aims to review the framework for improving subsidies from the government and other stakeholders in supporting revival of safe seaweed farming practices. The conducive policy and institutional environment would favor implementation. The key steps would start with evaluation of the current seaweeds value-chain including an assessment of the potential unharmful subsidies followed by an implementation proposal, reviewing the farming framework and re-designing the subsidies, operationalize and M&E framework. The solution is expected to enhance avoidance of future biodiversity expenditure due to poor seaweed farming practices and it will generate additional revenue where portions of the collected fees would be re-channelled to biodiversity conservation.

### *4. Secure Debt-for-nature swaps for BLUE economy implementation*

Debt-for-nature swap is one of the acceptable methods to generate funding for biodiversity conservation. In Zanzibar, coral reefs are rapidly declining due to anthropogenic threats. The FS aims to secure finance resources that would contribute address biodiversity conservation issues in the Blue Economy sector, of particular coral reef restoration, restricting further disturbances in other zones and establishing coral monitoring system. The recent debt swap agreement with the Rusian Federation amounting to USD 15m under the Union umbrella of the United Republic of Tanzania (URT) would provide an opportunity for its implementations. The key steps would include; awareness creation, advocacy, feasibility study, negotiation, signature stage, transfer of portion of the funds obtained to the RGoZ followed by monitoring of fund

transferred and expected results. The solution will generate additional financial resources meanwhile encouraging the realignment of current biodiversity expenditures for the coral reefs' restoration and other marine biodiversity.

***5. Reforming tourists entrance fee structure and improve collection system (Digital Voucher System) for MCAs and terrestrial protected areas***

Tourists entrance fees for PAs in Zanzibar are much lower compared to the Mainland Tanzania and other countries, yet the fee structure has not been reviewed. Further, the traditional fee collection mechanisms significantly contribute to low revenues leading to inadequacy in re-financing biodiversity conservation. This FS aims to review the current fee structure and fee collection system (Digital Voucher System) in order to enhance sustainable revenue collection with high potential for adequate re-investment to biodiversity conservation. The available financial regulations, the preliminary options regarding new entrance fees that have been explored by the MoBE&F. The key steps for its establishment and operationalization include; proposal writing, Willingness-To-Pay (WTP) survey, assessing the current fees' situation, designing and operationalize the web-based platform for the Digital Voucher System, preparing communication materials for a new fee structure, design the web-based platform and an effective M&E framework. FS will generate additional revenue, encourage better delivery and realignment of expenditures.

***6. Review and strengthen revenue retention Scheme for MCAs and Terrestrial PAs***

The current mechanism of re-financing conservation in PAs from the central government where all the monies collected are directed, takes a long process. The FS thus aims to develop an effective and efficient retention framework for PAs to ensure timely and adequately financing conservation activities in the respective PA. Lessons from a similar revenue scheme at Jozan-Chwaka Bay National Park and an existing financial regulation would ensure its establishment and operationalize. The key steps will include; proposal, an assessment of the existing Financial Plan and funding requirements per PAs, preparing guidelines and disbursement modalities, implementations and M&E Framework. The FS will enhance additional revenue and ensure better delivery.

## B. Ministry of Agriculture, Irrigation, Natural Resources and Livestock (MAINRL)

***7. Crowdfunding for Community Forest Management Areas (CoFMAs)***

Crowdfunding (CF), as one of the popular sources to support biodiversity conservation in the world, would suit to CoFMAs in Zanzibar to safeguard important habitats and biodiversity, corridors and/or buffer zones around core protected areas. Most of the CoFMAs are financially incapacitated for effective implementations. The FS aims to raise financial resources to address one specific biodiversity issue (tree planting, mangroves restoration, endangered species, etc) in one or more than one CoFMAs. To be successful key players will be involved: crowdfunders; crowd-funding platform such as through the People's Bank of Zanzibar (PBZ); and sponsors including the BIOFIN Global office and UNDP Co who would support the designing and crowdfunding campaigns. The key steps would include: planning for the CF, testing and launching, implementation and management, and M & E. The FS is expected to generate additional revenue to support one predetermined specific conservation issue in the specific COFMA (e.g., endangered species, megafauna, critical habitat, etc).

***8. Establish Payment for Ecosystem Services (PES) Programme for watersheds in CoFMAs and other forests***

innovative financing mechanism for a reliable finance resource for sustainable management of watersheds/catchment forests such as those found in COFMAs and other forests in Zanzibar. PES aims to reduce the financial gap in the management of watersheds/catchment forests found in CoFMAs and other forests. Existing institutional and policy framework for watershed in CoFMAs and other forests, together with appropriate PES contracts to be considered based on the payment mechanisms will create an ideal opportunity for the FS implementations. The key steps would involve; a feasibility study to determine the flow of the water and potential buyers/payers, preparing an implementation plan and payment mechanism (s), preparing PES contracts based on the payment mechanisms, operationalization of the PES Model and undertake M & E. The FS will generate additional revenue contributing to conservation of the forests and biodiversity therein. It will also enhance avoidance of future biodiversity expenditure linked to forests degradations.

## C. Department of Environment (DoE), FVPO

### *9. Establish and operationalize the PPP framework for "Re-greening Zanzibar Program"*

The "green cover" formed by forest cover including mangroves, coastal and terrestrial forests on the Zanzibar Island archipelago is under increasing pressure from human activities, leading to loss of biodiversity. Inadequate financial resources impose a big challenge to ongoing efforts to address the anthropogenic threats to the green cover and biodiversity in Zanzibar. The FS aims to support the implementation of the recently established "Green Ligancy Initiative in Zanzibar (2022 – 2027) for restoring "green cover" of the Zanzibar's land cover that will attract biodiversity. The PPP Department, established under the Zanzibar Planning Commission coordinating all the Public-Private Partnership projects implemented in Zanzibar provides an ideal environment for implementing the FS. Likewise, collaborative management partnership (CMP). The main steps will include; proposal writing, feasibility study, reviewing and re-designing PPP modalities, preparing an implementation plan and PPP CMPs contracts/agreements, operationalization and undertaking M&E. The FS will enhance avoidance of future biodiversity expenditure due to habitats degradation and loss of tree cover. It will motivate partners realign their expenditures to those activities contributing to the Re-greening process.

### *10. Develop a new program for scaling up REDD+ initiative*

This FS is in line with the Climate Change Fund and the proposed Blue Fund, anchored on lessons and experiences from the previous REDD+ in Zanzibar and elsewhere in the world. It has potential for biodiversity conservation and poverty reduction in rural communities. The FS aims to strengthen financial support to CoFMAs and other forests through re-designing focusing the use of co-benefit approach. The existing policy and institutional frameworks are conducive for reviewing, redesigning and scaling-up the REDD+ initiative. Key lessons reported from the previous REDD+'s in Zanzibar and elsewhere will be useful for a success. The main steps will include; proposal and feasibility study, baseline information in CoFMAs, preparing agreements and modalities for co-benefits, developing proposals to secure additional financial resources, reviewing by-laws and guidelines, Capacity Need Assessment (CNA) and Capacity development plan (CDP), re-design and implementations, and M & E framework. The FS is expected to generate additional financial resources, enhance avoidance of future biodiversity expenditure due to deforestation and in ensures better spending of the financial resources for biodiversity.

### *11. Establish crowdfunding for restoration of degraded mangroves and coastal forests*

Although many NGOs, institutions as well as individuals are involved in the restoration of mangroves and coastal forests in Zanzibar using different approaches, the practices are not successfully sustainable due to inadequate financial resources that would ensure stable success across all the sequential stages from nurseries to mature trees. This FS aims to secure the finance resources to support ongoing efforts, particularly at strategic stages of the restoration where the financial inadequacy significantly makes the ongoing efforts unsuccessful. The FS will be built on the ongoing efforts under the existing policy and institutional framework in addition to already established involvement and collaborations with different partners, NGOs, local communities, investors, etc. The process will go through key steps; planning, launching and testing, managing, and M&E. The FS is generated additional finance resource for restoration to achieve predetermined targeted number of trees (mangroves and forest) to be planted, managed and monitored to successful growth stages in intended areas.

### *12. Introduce subsidies for clean energy sources (gas and electricity) for household energy*

Different traditional sources of household energy, mainly fuelwood and charcoal account form more than 90 percent in Zanzibar as the second most driving factor that are contributing to loss of biodiversity through deforestation and forest degradations. This FS aims to review the framework on subsidies in the energy sector for strengthening unharmful subsidies on grid electricity, Oil and Gas. For successful implementations, key sectoral policies and strategies that support the establishment and implementation of the prioritized finance solution including the Zanzibar Energy Policy (2019). In addition, there are opportunities for the RGoZ through Zanzibar Electricity Corporation (ZECO) and Zanzibar Energy Sector Transformation Project No. P169561 to strengthen engagement of the private sector, NGO, investors and donors in energy development. The main steps for establishment and implementations would include; the feasibility study, detailed evaluation of the current subsidies, FS implementation proposal for the potential

sources of support, operationalizing the selected unharmful subsidies, and M & E. The finance solution is expected to enhance avoidance of future biodiversity expenditure likely to result from deforestation for fuelwood and charcoal burning. The subsidies will make gas and electricity affordable for most of the households in order to safeguard the forests and biodiversity therein.

## D. Ministry of Finance and Planning (MoF&P)

### *13. Review and strengthen CSR strategies for investors*

Ssignificant contributions of CSR to socio-economic development projects have been reported in Zanzibar, less has been testified on biodiversity and environmental related projects. The reports in Zanzibar have recommended on strengthening the CSR framework. The finance solution aims to support the review and strengthening of the CSR framework/ strategies to consider protection of terrestrial, coastal and marine habitats in the different socio-economic development projects supported through CSR in Zanzibar. The main opportunities available for its implementations include: investors are willing to support communities through CSR, a strong political will enough to have a plan for strengthening legal and policy environment to back-up the CSR; and an expected support by BIOFIN to develop a pipeline of good transparent biodiversity projects in community areas to receive CSR and capacity building. The main steps would include: a feasibility study to explore on different opportunities for improving the CSR arrangements; lobbying and awareness raising strategies for investors, communities and the government; improving modalities/ mechanisms for CSR, developing a pipeline of good transparent biodiversity-focused projects to receive CSR; capacity building, developing coordination arrangements, reviewing investment guidelines to address effective CSR. The FS will generate additional finance resources for communities, biodiversity and environment protection from the current 6% to at least 12% between 5 – 10 years. It will improve collaborations between investors, the Government and communities.

**Recommendations**

Generally, the RGoZ experiences a large financial gap in biodiversity conservation. However, the prioritized 13FSs would reduce the gap ultimately contributing to the Zanzibar Vision 2050, SDGs and the AICHI Biodiversity Targets. Interestingly, the prioritized FSs showed a very high synergistic potential since each would contribute to more than one biodiversity targets. To achieve the expected financial results from the FSs, the following have been recommended:

- The First Vice President Office-Department of Environment (FVPO-DoE); Ministry of Blue Economy and Fisheries (MoBEF); the Ministry of Agriculture, Irrigation, Natural Resources and Livestock (MAINRL), other MDAs and Non-state Actors need to strengthen their collaborations along the BIOFIN National coordination structure for BFP implementations.
- To embed the BIOFIN-related functions into existing biodiversity coordination framework under the FVPO and focal points/persons in the implementing MDAs and Non-state Actors.
- Preparation of Zanzibar Biodiversity Strategy and Action Plan (ZABSAP) would ensure the prioritized FSs are reflected in addressing the threats to biodiversity. The UNDP through its BIOFIN Global office would work with the RGoZ to mobilize the financial resources needed for the ZABSAP.
- The government support to incentivize private sector and in risks management during implementations.
- Capacity building to key implementers and coordination to ensure the continual implementations of already prioritized FSs before and after the BIOFIN programme ends. The capacity building has to enhance ability to establish and implement new FSs in the absence of the BIOFIN programme.
- If successfully implemented in Zanzibar the initiative could be scaled up to the mainland Tanzania.

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# ABBREVIATIONS

| | |
|---|---|
| ABS: | Access and Benefits Sharing |
| BER: | Biodiversity Expenditure Review |
| BFP: | Biodiversity Finance Plan |
| BIOFIN: | Biodiversity Finance Initiative |
| CBD: | Convention on Biodiversity Diversity |
| CBOs: | Community-Based Organizations |
| CoFMAs: | Community Forestry Management Areas |
| CSOs: | Civil Society Organizations |
| CSR: | Community Social Responsibilities |
| DoE: | Department of Environment |
| DMC: | Department of Marine Conservation |
| DPs: | Development Partners |
| DFNRNR: | Department of Forestry and Non-Renewable Natural Resources |
| EEZ: | Exclusive Economic Zone |
| EIA: | Environmental Impact Assessment |
| FNA: | Finance Needs Assessment |
| FSs: | Finance Solutions |
| GCF: | Green Climate Fund |
| GDP: | Gross Domestic Product |
| GEF: | Global Environmental Facility |
| IBAs: | Important Birds Areas |
| IUCN | International Union for Conservation of Nature |
| LDCF: | Least Developed Countries Fund |
| MAINRL: | Ministry of Agriculture, Irrigation, Natural Resources and Livestock |
| MCAs: | Marine Conservation Areas |
| MDAs: | Ministries, Departments and Agencies |
| MoBE&F: | Ministry of Blue Economy and Fisheries |
| MoF&P: | Ministry of Finance and Planning |
| NBSAP | National Biodiversity Strategy and Action Plan |
| NGOs: | Non-Governmental Organizations |
| ODA: | Official Development Assistance |
| PES: | Payment for Ecosystem Services |
| PIR: | Policy and Institutional Review |
| PO-F&P: | President's Office, Finance and Planning |
| REDD+ | Reduction of Emissions from Deforestation and forest Degradation |

| | |
|---|---|
| RGZ: | Revolutionary Government of Zanzibar |
| SDGs: | Sustainable Development Goals |
| SWIOFISH: | South-west Indian Ocean Fisheries |
| UNESCO: | United Nations Educational, Scientific and Cultural Organization |
| URT: | United Republic of Tanzania |
| ZABSAP: | Zanzibar Biodiversity Strategy and Action Plan |
| ZATI: | Zanzibar Association of Tourism Investors |
| ZCT: | Zanzibar Commission of Tourism |
| ZDV50: | Zanzibar Development Vision 2050 |
| ZEMA: | Zanzibar Environmental Management Authority |
| ZPC: | Zanzibar Planning Commission |
| ZSGRP III (In Swahili, MKUZA): | Zanzibar Strategy for Growth and Reduction of Poverty (In Swahili language MKUZA III: Mkakati wa Kukuza Uchumi Zanzibar III) |

# 1 INTRODUCTION

## 1.1 Zanzibar's Socio-economic context

Zanzibar is an archipelagic state within the United Republic of Tanzania (URT) consisting of Unguja and Pemba islands and 53 other small islets, with surface area of 2,654 km$^2$ whereas the URT has a total area of 945,800 km$^2$. It is highly endowed with high biodiversity in marine, coastal, mangroves and terrestrial ecosystems, partly attributed to the tropical climate. Zanzibar's current population is at 1,889,773 (male = 915,492; Female=974,281) with growth rate (2012 – 2022) of 3.7[1]. Zanzibar is characterized by small land size, with implied pressure on biodiversity and coastal environment along with climate change challenges. Its strong unique coastal and marine biodiversity and cultural richness sustains the isles population livelihoods and the tourism assets with an estimated 29% contribution to the Zanzibar Gross Domestic Product (GDP) and approximately one-third of the workforce that is directly connected to the Blue Economy. The entire fishing grounds are about 4,000 square kilometers for Unguja and 2,720 square kilometers for Pemba. Over 90 percent of the fisheries production in Zanzibar is artisanal conducted in the shallow waters. About 99% of Zanzibar's international trade by volume is seaborne[2].

Mainland Tanzania and Zanzibar share an exclusive economic zone (EEZ) of 223 000km². Zanzibar has retained autonomy over certain issues and exercises total jurisdiction on environmental management and natural resources separate from the Union (URT) laws. Issues of international relations are Union matters, thus international legal instruments that have a bearing on environmental and conservation matters (such as matters to do with the EEZ) are dealt with at a Union level. At the national level, therefore, the legislation and management of MPAs differ between these two parts of the URT.

## 1.2 Biodiversity Finance Initiative for Zanzibar

The Revolutionary Government of Zanzibar (RGZ) has made various efforts to conserve its biodiversity including policy and institutional development. It provides financial resources for biodiversity conservation by allocating internal budgets and soliciting support from development partners to finance conservation programs. However, like other developing countries, Zanzibar is experiencing significant financial gaps in biodiversity conservation. To reduce or fill the gaps, Biodiversity Finance Initiative (BIOFIN) was launched in October 2012 as a global partnership seeking to address the biodiversity finance challenge comprehensively and systematically. It is managed by the UNDP - Ecosystems and Biodiversity Programme, in partnership with the European Union, the Governments of Germany, Norway, Switzerland, Belgium and the Flanders. Tanzania is one of the forty-one (41) countries that are participating in BIOFIN Phase II for the period of 2018-2025. The initiative has been piloted in Zanzibar in accordance with the BIOFIN Workbook Methodology (2018)[3] to develop a Biodiversity financial plan (BFP) as a key tool for effective biodiversity financing in Zanzibar.

This BFP provides a roadmap for implementing prioritized biodiversity finance solutions for the period of five years (2022 – 2026) in Zanzibar. The BFP presents priority biodiversity finance solutions, considers their feasibility and potential, and outlines broad next steps towards its implementation. It aims to ensure sustainable financial resources to address the biodiversity-related four finance results described in the Work Book i.e., generate revenues, realign expenditures, deliver better, and avoid future expenditures. It was developed based on the initial three BIOFIN components; Policy and Institutional Review (PIR), Biodiversity Expenditure Review (BER), and Finance Needs Assessment (FNA) using the methodological process described in the BIOFIN WorkBook of 2018.

## 1.3 Structure of the BFP

The Zanzibar BFP structure follows the BIOFIN WorkBook (2018) format where:

- **Section 2** describes the vision and an investment case for biodiversity in Zanzibar considering; its national and global importance, how the plan is linked to Zanzibar's national priorities and strategies (e.g., NBSAP, ZABSAP, Blue Economy, climate change, and contributions to the SDGs). The section provides the reasons for investing in biodiversity and highlights the Plan's contribution to Zanzibar's people, nature, and the economy in general.
- **Section 3** focuses on the goals and targets of the BFP, introducing prioritized finance solutions, and describes the Plan's specific targets including the resource mobilizations.

[1] National Bureau of Statistics 2022- https://www.nbs.go.tz/index.php/en/

[2] Zanzibar Statistical Abstract. OCGS (2019)

[3] https://www.biofin.org/knowledge-product/biofin-2018-workbook

- **Section 4** that forms the core part of this BFP provides detailed descriptions of the prioritized finance solutions, giving their objectives (expected financial results and investment case), key next steps, milestones, and actors' role in the plan's governance and its implementation.
- **Section 5** provides a summary Action Plan in which actions are grouped with indicative budget. It shows the landscape view of the Plan's components.
- **Section 6** provides the main annexures referenced in the BFP

## 2 VISION AND INVESTMENT CASE

### 2.1 Overview

Tanzania has set aside about 40% of its total area (6.5% of marine and 33.5% of terrestrial) under protection that surpasses the 2020 Aichi Targets. For Zanzibar, based on the number (6) and total area under marine conservation areas (~2100 $km^2$, almost 80% of its total surface area), exceeds the 10% set by Aichi Target 11 (IUCN, 2020), (Table 1). This progress is due to the political importance placed on biodiversity through vibrant policy development, planning, and financing i.e., mainstreaming of biodiversity conservation in policies, legal frameworks, and strategies (Vision 2050, Zanzibar Blue Economy and the planned Zanzibar Biodiversity Conservation Strategy and Action Plan). The broad categories of habitats for biodiversity consist of coastal forests, mangroves, coral reefs, and seagrass beds (marine ecosystem), terrestrial forests, rivers, swamps and coral reefs (Table 1). The coral reef ecosystem has about 150 different coral species spanning almost the entire Zanzibar coast and with 90% of all coral species recorded in East Africa serving as a home for over 350 fish species and diverse species of crabs and lobsters.

**Table 1: Endemic and threatened animal species in Zanzibar**

| Common Name | Scientific Name | Area of Endemism | IUCN Red List Status |
|---|---|---|---|
| Mammals | | | |
| Red colobus monkey | Procolobus kirkii | Endemic – Unguja | |
| Heart-nosed Big-eared Bat | Cardioderma cor | Endemic in Unguja | |
| Decken's Horse-shoe Bat | Rhinolophus deckeni | Endemic in Unguja | |
| Zanzibar Eastern tree hyrax | Dendrohyrax validus neumanni | Endemic subspecies - Unguja | |
| Pemba flying fox | Pteropus voeltzkowi | Endemic – Pemba | |
| Zanzibar leopard1 | Panthera pardus adersi | Endemic subspecies - Unguja | |
| Pemba blue duiker | Cephalophus monticola pembae | Endemic subspecies - Pemba | Least Concern |
| Black and rufous elephant shrew | Rhynchocyon petersi | Endemic – Unguja | Least Concern |
| Zanzibar slender mongoose | Herpestes sanguineus rufescens | Endemic subspecies | Least Concern |
| Zanzibar bushy tailed mongoose | Bdeogale crassicauda tenuis | Endemic subspecies - Unguja | Least Concern |
| Zanzibar servaline genet | Genetta servalina archeri | Endemic subspecies – Unguja | Least Concern |
| Reptiles | | | |
| Pemba day gecko | Phelsuma abbotti | Endemic – Pemba | Least Concern |
| Pemba worm snake | Leptotyphlops pembae | Endemic – Pemba | Least Concern |
| Pemba island writhing skink | Lygosoma pembanum | Endemic - Pemba | Least Concern |
| Pemba island skink | Mochlus pembanum | Endemic subspecies - Pemba | Least Concern |
| Pemba marsh snake | Natriciteres variegata pemba-num | Endemic subspecies - Pemba | Least Concern |
| Pemba wolf snake | Lycophidion capense pembanum | Endemic subspecies- Pemba | Data Deficient |
| Amphibians | | | |
| Running Jozani frog | Kassina jozani | Endemic – Unguja | |
| Pakenham's river frog | Phrynobatrachus pakenhami | Endemic – Pemba | |
| Birds | | | |
| Zanzibar fisher's turaco | Tauraco fischcheri zanzibaricus | Endemic subspecies - Unguja | |
| African paradise flycatcher | Terpsiphone viridis ungujaensis | Endemic subspecies - Unguja | |

| Common Name | Scientific Name | Area of Endemism | IUCN Red List Status |
|---|---|---|---|
| Pemba scops-owl | Otus pembaensis | Endemic – Pemba | |
| Pemba white-eye | Zosterops vaughani | Endemic – Pemba | Least Concern |
| Pemba sunbird | Nectarinia pembae | Endemic – Pemba | Least Concern |
| Pemba African goshawk | Accipiter tachiro pembaensis | Endemic – Pemba | Least Concern |
| Pemba green-pigeon | Treron australis pembanis | Endemic subspecies - Pemba | Least Concern |
| Dickinson's Kestrel | Falco dickinsoni* | Endemic in Pemba | Least Concern |

*Source*: HIMA (2014); and www.iucnredlist.org, cited in Zanzibar BIOFIN PIR Report, 2020.

## 2.2 The importance of biodiversity at national and global levels

Biodiversity has significant importance in Zanzibar both at national and global levels. It contributes to GDP through biodiversity related investments, user fees from parks, and employment along the tourism value chain, aquaculture and organic farming (Table 2). National Development Vision 2050 and the Zanzibar Blue Economy expound the importance of Biodiversity in the social economic development. For instance, fisheries sector generates USD 50 million from both the tourism and local channels (ZATI, 2010, SWIOFish, 2018). There is high dependency ratio in fishing communities, with 36.9% of fishermen. The seaweed contributing about 25% to Zanzibar's GDP provides an alternative source of income to local communities. Tourism in Zanzibar is well linked with biodiversity, highly diversified from coastal, beach, and recreation activities in terrestrial and marine destinations. It is one of the key pillars of the Zanzibar economy (RGoZ, 2020).

**Table 2: Biodiversity importance/dependence in Zanzibar**

| Priority area | Importance related to biodiversity and sustainable development goals |
|---|---|
| Conservation importance | • Increased area under protection with initiatives on protected areas establishment and restoration including MPAs; seasonal fishing zones, terrestrial parks, reserves and CoFMAs).<br>• Flagship species conservation and protection both endemic and threatened species such as the endemic, Zanzibar red colobus (*Procolobus kirkii*).<br>• Conservation of ecosystems such as coral reefs and landscapes |
| Economic value | • Contribution to GDP through biodiversity related investments, revenues from user fees from parks, and employment created from the tourism value chain.<br>• Opportunity costs including safeguards on pollution/environmental management charges.<br>• Biodiversity related income from tourism, agriculture i.e. organic farming. |
| Social value | • Access and sharing of benefits i.e. empowerment of local communities through CoFMAs currently 64, established with revenues sharing options.<br>• Diversification of livelihoods and income generation activities, e.g. seaweed farming, ecotourism and beekeeping. |
| Political importance | • Vibrant policy development, planning and financing i.e. mainstreaming of biodiversity conservation in policies, legal frameworks and strategies (Vision 2050, Zanzibar Blue Economy, the planned Zanzibar Biodiversity Conservation Strategy and Action Plan, and natural resources sector policies.<br>• Development of institutions charged with biodiversity related management responsibilities.<br>• Openness and all -inclusive participatory structures and practices. |

## 2.3 Positive trends of biodiversity conservation

Different and diverse biodiversity exist in Zanzibar:

***a)*** ***Mangroves:*** 10 mangrove species are occupying coastal areas covering about 6,000 ha and 12,000 ha in Unguja and Pemba Islands respectively. *Rhizophora mucronata* dominates with a large percentage occurring in Pemba Island. *Avicenia marina* occurs on both Pemba and Unguja islands. the *Ceriops tagal* and *Bruguiera gymnorhiza* are predominant on Unguja island.

***b)*** ***Coral reefs:*** The open sea provides a transition for nutrients and nourishment for a wide diversity of reef, sardines and other small pelagic fish that are commercially important for local fishermen and coastal community livelihoods.

***c)*** ***Important Bird Area***: Zanzibar is an Important Bird Area (IBA) that attracts large numbers of

Terek Sandpipers, Crab Plovers, Roseate Terns, Greater Sand Plovers and Saunder's Terns. The main species of IUCN concern include the Near-threatened *Tauraco fischcheri zanzibaricus* and *Terpsiphone viridis ungujaensis* which are endemic subspecies in Unguja. The vulnerable endemic *Otus pembaensis are* endemic in Pemba.

***d) Protected areas:*** Zanzibar has significantly increased its protected areas (PAs) under protection including terrestrial protected areas, Marine Conservation Areas (MCAs), (Table 3 and 4). It has critical global sites that include the Jozani – Chwaka Bay National Park Forest Reserve, established as National Park in 2004, and a UNESCO Man and Biosphere Reserve since 2016. The Jozani Forest and Chwaka Bay National Park and Ras Kiuyu Forest Reserve in Pemba also harbor species included in the IUCN Red Data Book. There are 64 Community Forestry Management Areas (CoFMAs) covering 88,900 ha: 68,218 ha (37 CoFMAs) on Unguja Island and 20, 682 ha (27) on Pemba Island established as part of the participation and involvement of local communities in natural resources management (NRM). Communities are also involved in fisheries, marine, fishing quotas, and closure seasons with incentives related to revenue sharing programs.

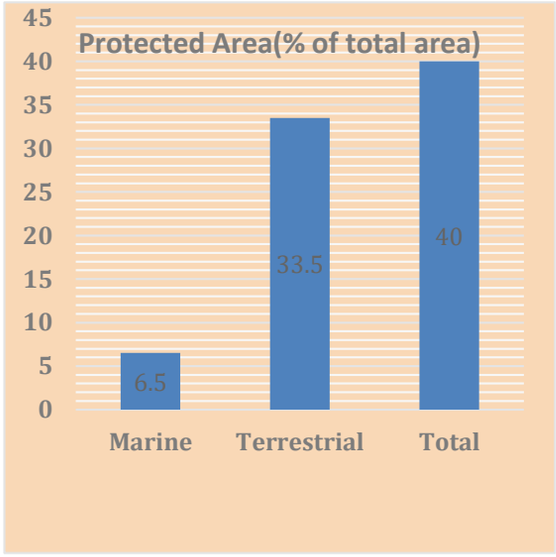


**Table 3: Marine Protected Areas**

| Name of the MCA | Declaration Date | Area ($km^2$) | Ownership Status | Management Planning |
|---|---|---|---|---|
| | 1997 | 717.5 | Public | General Management Plan was developed in 2010, reviewed in 2012 and in 2018-2019. This requires a review. |
| | 2002 | 337.3 | Public | GMP was established in 2005 and finalized in 2010. It requires an updated GMP. |
| | 2005 | 825.8 | Public | GMP was developed in 2010 and was due for review as of 2018-2019 |
| | 1994 | 0.55 | Private | It has an up-to-date Management Plan (2017-2027) |
| | 2015 | 162.9 | Public | A Management Plan was developed in 2018-2019 and now due for review. |
| | 2015 | 118.2 | Public | A Management Plan was developed in 2018-2019 and now due for review. |
| | | **~2100** | | |

*Source*: IUCN, 2020

**Table 4: Terrestrial protected areas**

| Name | Area (ha) | Location |
|---|---|---|
| National parks | | |
| Jozani-Chwaka Bay National Park | 6,434 | Unguja |
| Forest reserves | | |
| Jambiani-Muyuni Forest Reserve | 4,212 | Unguja |
| Kichwele Forest Reserve | 637 | Unguja |
| Kiwengwa-Pongwe Forest Reserve | 3,040 | Unguja |
| Malilini Forest Reserve | 406 | Pemba |
| Masingini Forest Reserve | 566 | Unguja |
| Msitu Mkuu Forest Reserve | 180 | Pemba |
| Ngezi-Vumawimbi Nature Reserve | 2,900 | Pemba |
| Ras Kiuyu Forest Reserve | 270 | Pemba |
| Ufufuma – Pongwe Corridor Forest Reserve | 1,988 | Unguja |
| Government forest plantations | | |
| Chaani-Masingini Forest Plantation | 420 | Unguja |
| Dunga-Jendele Forest Plantation | 887 | Unguja |
| Kibele Forest Plantation | 2,929 | Unguja |
| Maziwang'ombe Forest Plantation | 100 | Pemba |
| Rubber Plantations | 633 | Pemba |
| Mangroves | | |
| Mangrove Forest Reserves | 16,489 | Unguja/Pemba |
| Community managed areas | | |
| Areas under CoFMAs | 88,900 | Unguja/Pemba |
| **Total** | **130,991** | |

*Source: RGZ (2019)*

***e) Marine species and ecosystems:*** Zanzibar host numerous Sea turtles, marine mammal species such as whales, dugongs and a habitat for resident population of Bottlenose and Humpback dolphins. These species are an important part of the balanced ecosystem and tourist attractions. Other ecosystem services from submarine resources include Carbon sequestration and storage, food provision for marine organisms, genetic resources, regulating service through waste absorption and detoxification, nutrient cycling and water circulation and exchange.

***f) Flagship species conservation and protection*** of both endemic and threatened such as the endemic, Zanzibar red colobus (*Procolobus kirkii*). Various endemic species include; (a) **Mammals:** Ader's Duiker (*Cephalophus adersi*), Pemba Flying fox (*Pteropus voelzkowi*), Zanzibar red colobus (*Piliocolobus kirkii*), and Blue duiker (*Cephalophus monticola sundevalli*); (b) **Reptiles:** Pemba day gecko (*Phelsuma parkeri*), Pemba speckle-lipped skink (*Trachylepis albotaeniata*), Pemba marsh snake (*Natriciteres pembana*), Pemba wolf snake (*Lycophidion pembanum*), Pemba worm snake (*Leptotyphlops pembae*) and Pemba Gracile blind snake (*Letheobia pembana*); (c) **Amphibians:** Pemba puddle frog (*Phrynobatrachus breviceps*), Jozani Running Frog (*Kassina jozani*), Ngezi reed frog (*Hyperolius watsonae*) and Pakenham's River frog (*Phrynobatrachus pakenhami*); and (d) **Plants:** Pemba aloe (*Aloe pembana*) and Pemba palm (*Dypsis pembana).*

***g) Seagrass*:** Several seagrass species growing in the shallow and intertidal mud and sand flats. The most common genera being *Thalassia, Halodule, Syringodium, Halophila, Cymodocea* and *Thaassodendron.* They are important nursery and foraging areas for fish species.

## 2.4 Drivers of biodiversity loss and ecosystem degradation

Zanzibar as part of Tanzania is among 15 countries registering the highest number of threatened species as a result of (i) increased habitats loss, degradation and fragmentation; (ii) over-exploitation of natural resources (wildlife, forests, and aquatic resources); (iii) climate change and v) invasive alien species. Trends show that the drivers are associated with population growth, urban sprawling, land-use conversion for residence, agriculture, insfrstrcuture, failure of conservation management measures, and inadequate public awareness of biodiversity's contribution to sustainable development. Institutional challenges to sustainable biodiversity management include inadequate elaboration of Zanzibar's biodiversity priorities in the National Biodiversity Strategy and Action Plan (NBSAP), limited biodiversity integration in key policies and development plans, inadequate private sector engagement, and access to global financing opportunities.

## 2.5 Linkage of biodiversity to the country's priorities and strategies

Biodiversity management builds on the policies and institutional frameworks as embedded in various national policies and strategies namely:

a) **Zanzibar Development Vision 2050 (ZDV50)** which aspires to lift Zanzibar to an Upper-Middle Income country by 2050 and enhance its contribution to international commitments including Agenda 2030 for Sustainable Development;

b) **Zanzibar National Investment Guide of 2022**_that promotes support to biodiversity conservation from potential investments in different sectors in Zanzibar._

c) **Zanzibar Blue Economy strategy** that promotes marine resources utilization and the benefits through integration of ocean economy in the overall national development and builds on ZDV50 focusing on effective coordination and managing development of the ocean and its endowments;

d) **Zanzibar Strategy for Growth and Reduction of Poverty (ZSGRP III) – MKUZA III** that focuses on improving gender-responsive environmental measures;

e) **National Biodiversity Strategy and Action Plan-2015-2020** (NBSAP – under review) with specific efforts being to prepare Zanzibar-focused Biodiversity Strategy and Action Plan (ZABSAP); and

f) **Sectoral policies, strategies and legal frameworks** related to main biodiversity sectors that include 18 policies, 6 legal frameworks and 8 strategies and plans.

## 2.6 Contributions to Sustainable Development Goals

Biodiversity management and sustainable utilization build on the national commitment and plans that contribute directly to the following SDGs:

**SDG 1** as biodiversity conservation and ecosystems supports livelihoods of communities surrounding core protected areas and implementation of alternative income-generating activities. Biodiversity conservation builds on equity, ownership, and control for the local communities promoted through equal participation of men and women.

**SDG 2** where biodiversity contributes to provision for income of small-scale producers, in particular women i.e. on seaweed farming and fishers through secure and access to fisheries employment opportunities and value chain.

**SDG 6** as biodiversity in protected catchments, restoration of ecosystems, including forests, wetlands and rivers contribute to supply of clean water.

**SDG 7** where promotion of affordable and clean energy introduced and supported through energy-efficient stoves and clean technology reduces consumption of firewood and charcoal.

**SDG 13** as management and restoration of forests contributes to climate change resilience through climate compatible activities, such as conservation agriculture, tree planting, and forests conservation. Management of mangroves contributes to reduction of climate change impacts for the coastal and marine biodiversity that supports coastal communities and potential impact on tourism that heavily rely on marine biodiversity.

**SDG 14** where the oceans and the marine and coastal resources and ecosystems play a significant role in Zanzibar's sustainable development. The Blue economy specifically focuses on this; with actions related to regulating, harvesting, reducing illegal fishing practices; prohibiting subsidies that contribute to overcapacity and overfishing; and increasing the economic benefits for these small

islands state including sustainable management of fisheries, development of aquaculture, and enhancing coastal tourism.

**SDG 15** where sustainable management of forests, reduced desertification, and land degradation will reduce biodiversity loss. This would be ensured through conservation, restoration, and sustainable use of terrestrial and freshwater ecosystems and their services, reduced degradation of natural habitats, halted loss of biodiversity and prevention of threatened species extinction.

### 2.7 Why invest in biodiversity in Zanzibar?

Zanzibar's biodiversity has a broad contribution to the national economy and its social wellbeing. Poverty reduction and economic development depends on sustainable management of the natural capital, especially the coastal and marine ecosystem, currently under the Blue Economy model. The recent Zanzibar National Investment Guide with Sector Profiles acknowledges the importance of biodiversity and environment, and hence promotes their considerations for any investment in Zanzibar (RGoz, 2022). This has been emphasized by the government to make some islands available for lease to potential investors: Miwi, Popo, Sume, Kwata, Fundo, Kashani, Njao, Jombe and Matumbini. This is a great commitment for biodiversity and environment. The observed finance gaps for addressing different threats to biodiversity and ecosystems in Zanzibar means a cascading damage to the back-bone of its economy. Zanzibar embarked on rapid growth of a tourism-based economy since 1985. Its touristic diversified destinations and attractions are related to biodiversity, ecosystem health and cultural heritage-related packages. The number of tourists in Zanzibar before the COVID-19 pandemic was on the rising trend. The number reached about 538,000 visitors in 2019 before the pandemic. In 2020, the number of visitors was around 260,000. In 2021, the number started rising to 394,000. The economic benefits from tourism are diverse, including fees, employment, businesses and various socio-cultural benefits.

The observed trends of tourism performance in Zanzibar provide a clear picture of the importance of protecting and conserving the various tourism bases. Nonetheless, despite its clear economic importance, the biodiversity and the ecosystems are being threated mainly due to human causes: uncontrolled tourism development, rapid population growth, overfishing and destructive fishing practices, overharvesting of mangroves, dumping of untreated wastewater from urban areas and periodic coral bleaching. Hence, sustainable finance resources are needed to safeguard the biodiversity and the ecosystems at large. Any investment for biodiversity conservation and related ecosystems in Zanzibar such as BIOFIN, that establishes and support implementation of various finance solutions for biodiversity are of great importance. The main biodiversity financing mechanisms identified during the PIR do not fulfill the financial gaps that are facing biodiversity conservation in Zanzibar. The mechanisms are centered on the government and its agencies, international sources in the form of loans, grants, or subsidies through the Official Development Assistance (ODA). Other finance mechanisms focused on the private sector investments, NGOs, CBOs, and biodiversity-related projects (Box 1). The observed financial gaps call for establishment and operationalize prioritized finance solutions.

**Box 1: Current Biodiversity related financing mechanisms**

- The Government (RGZ) through National planning and budgeting based on national priorities in the FYDP
- Bilateral grant funding to RGZ through budget support, sector budget support, and projects
- Multilateral Funds (e.g. GEF, LDCF, Adaptation Fund, GCF, etc.) based on Conventions
- Development Partners (DPs) projects funding through NGOs and Civil Society
- Grants and loans to private sector investments
- RGZ Special Funds (e.g. National Climate Change Financing Mechanism, Tourism Fund)
- Private sector CSR
- Ring-fenced charges and taxes charged for re-investment based on respective laws
- Debt-for-nature swaps
- Levies (hotels, lodges, restaurants, and tour operators
- Fees and charges from exploitation and use of biodiversity resources, e.g. entry fees in protected areas
- EIAs and Environmental Audit work
- Tourism-related taxes
- Fees and taxes on sustainable production and sales of forest and marine products
- Fisheries and mariculture products
- Agricultural products (sales of paddy and horticultural products)
- Bio-safety fees for the importation of alien plants and animals

# 3 METHODOGICAL APPROACH

## 3.1 GOALS AND TARGETS

The BFP as the main guiding document for implementing prioritized finance solutions for the next 5 years in Zanzibar aims to present a coherent and comprehensive approach to mobilizing additional finance resources for biodiversity conservation. Ultimately, it aims to fulfill all four finance results provided in the BIOFIN WorkBook of 2018: generate revenues, realign expenditures, deliver better, and avoid future expenditures. In these perspectives it focuses to address major policy, financial and other resource gaps across all sectors directly and/or indirectly responsible for biodiversity conservation in Zanzibar. Methodologically, the plan's goals and targets are built on the key issues and recommendations drawn from the PIR, BER and FNA reports.

### *3.1.1 Key issues and recommendations drawn from PIR, BER and FNA reports*

**a) The key Issues that partly formed the basis for FSs are presented in Box 2 below.**

**Box 2: Key issues drawn from the PIR report**

- The current various sources of biodiversity finance in Zanzibar are inadequate, highly dependent on Official Development Assistance (ODA) which are not predictable and are difficult to plan.
- Existing Biodiversity strategies and plans are inexplicit to inform prioritization in national planning and budgets, i.e. Planning and Budget Guidelines do not incorporate specific codes for biodiversity conservation to allow resource mobilization and allocation.
- Biodiversity is inadequately mainstreamed in sectoral plans and strategies, thus mostly addressed as part of broader Environment/Natural Resource Management actions identified and included in the Annual Plans and Budgets; or stand-alone projects, mostly funded from external sources.
- Strategies for private sector engagement are limited in addressing biodiversity finance solutions such as Corporate Social Responsibility, investment in natural resources, and Payment for Ecosystem Services (PES).
- Knowledge of economic values of biodiversity products and services in terrestrial, coastal and marine ecosystems is limited that would inform the financing of biodiversity conservation and investments.
- Specific Biodiversity Strategy and Action Plan for Zanzibar is absent to facilitate implementation and fundraising/resources mobilization for the same.
- There is an inadequate capacity to develop biodiversity-related business cases and access to external financing from global windows.
- The most prominent subsidies and incentives noted from the key sectors (Agriculture, Energy & Coastal Mining, Fisheries, Forestry, and Tourism) have potential impact (positive/negative) on biodiversity through direct cash payments, relief from a tax burden, protection from competition, or other policies intended to reduce financial burden.

The key recommendations drawn from the PIR report are grouped into three categories namely, on improving (i) Conservation, focusing on integrating biodiversity conservation into policies and strategies, (ii) Access and Benefits Sharing (ABS) through participatory biodiversity conservation, and (iii) sustainable use including private sector engagement. They all focus on enhancing, improving, amending, or modifying existing policies and practices to achieve biodiversity conservation goals in Zanzibar.

Hereunder are the main recommendations from the PIR component:

**(i) Integrating biodiversity conservation into policies and strategies through;**

- Development of Zanzibar Biodiversity Strategy and Action Plan (ZABSAP) in line with Blue Economy strategy, National Development Vision 2050, the Five-Year Development Plan (2020 – 2025), and MKUZA IV (under review during this process),
- Integrating conservation objectives in economic policies and development planning,
- Strengthening inter-sectoral coordination for biodiversity,
- Reviewing the planning and budget guidelines to incorporate biodiversity codes,
- Strengthening biodiversity governance and developing programs to access external financing,
- Capacity building for accessing external funding,
- Tracking biodiversity funds available both

internal and external sources.

- Biodiversity economic valuation to inform policy and decision and policymakers.

**(ii) Supporting participatory biodiversity conservation**

- Promoting alternative biodiversity-related livelihood options,
- Facilitating buffer zones establishment around core protected areas for conservation and livelihood
- Engaging and providing incentives to local communities in surveillance around PAs, mangroves, and coastal biodiversity,
- Facilitating sustainable use of terrestrial and marine biodiversity, and
- Strengthening the co-management: create and/or restore 'buffer zones and corridors through Community Forestry Management Areas (CoFMAs).

**(iii) Strengthening private sector engagement in biodiversity conservation**

- Creating a conducive environment for private sector engagement, e.g. tourism and energy development,
- Strengthening Public-Private Partnerships and Corporate social responsibility,
- Improve implementation and repurposing subsidies and incentives to promote biodiversity-related investments, e,g, tourism, fisheries and seaweed farming,
- Ensure the oil and gas industries compensate for environmental damages,
- Harness opportunities for eco-labeling for biodiversity products, agricultural produce, and tourism investments,
- Put in place and implement biodiversity offsets to compensate for biodiversity loss,
- Implement mitigation measures provided in Environmental Impact Assessment (EIA) reports,
- Promoting Payment for Ecosystem Services (PES) in biodiversity-rich areas,
- Facilitate the scaling up of REDD+ initiatives, and
- Review revenues and taxes from biodiversity and justify for re-investment in conservation

**b) Key issues, findings and recommendations from the BER report**

***Key issues***

- A wide variation in budget performance that makes it difficult to forecast budget trends;
- Significant budget support from development partners, reducing the public finance gap;
- skewed budget allocation, mostly to recurrent expenditure.
- Lack of central coordination for private sector financing on biodiversity conservation limiting establishment of the levels of funding for biodiversity from their sources and monitoring results at a national level. There is no monitoring framework to track biodiversity financing by the private sector and other non-government entities.
- The bulky of biodiversity funding for private sector and NGOs come from donations, gifts, grants and income from tourism activities. These sources are highly susceptible to economic slowdowns and tourism sector disruptions like the recent COVID-19 pandemic that highly affected their projects during the peak of COVID-19 pandemic.

***Key findings***

- Overall budget allocation attributed to biodiversity expenditure was very low, less than half of a percent of the total government budget, mainly due to: a) competing priorities in the public sector with more focus on social services and infrastructure development; b) low understanding of the importance of biodiversity and its contribution to economic growth.
- The trends for budget allocation and actual expenditure for most MDAs indicated a declining allocation and more so for the development budget.
- The NGOs plays a significant role in facilitating biodiversity related initiatives, e.g. marine conservation, beach management; environment education, co-management of PAs; alternative energy sources; and sustainable agriculture.

- The Private sector plays a significant role including recycling of grey water; minimising the use of plastics materials and use of renewable energy sources such as solar energy, collaborating with communities.
- The estimated total expenditure for biodiversity in the period of 2018/19 to 2021/22 is TZS 28.313 billion equivalent to USD 12,275,076 using exchange rate of TZS 2310 per USD as of 10th May 2022.
- Funds from the government accounts for 65% of the total biodiversity expenditure while NGOs and private MPA, and community conservation accounts for 35% of the total expenditure.
- Total biodiversity expenditure accounted for 0.38% to 0.4% of the total government budget for the period of 2018/19 to 2020/21.
- Biodiversity expenditure was allocated to different BIOFIN categories. The expenditure from the public sector was attributed to: Sustainable use 71%; Biodiversity Development and Planning 11%; Green economy 1%; protected areas and other conservation measures 4%; restoration 1% and pollution management 0.17%. From the private sector, the expenditure was attributed to protected areas and other conservation measures (46%); Biodiversity knowledge and awareness 28%; Biodiversity and Development Planning 8%; Restoration 2%; Pollution management (4%), and Sustainable use 12%.
- The development expenditure for some departments was very low. For example, Department of Environment 0.4% and 0.07% for 2018/19 and 2019/20. In the same period the development expenditure for department of forestry was 1%, the department of agriculture 2.3% and 9.5%. The development expenditure for the department of livestock for 2019/20 was high (34%) due to ongoing projects for construction of animals' inspection centers. High development expenditure was also observed for the department of fisheries (40%).

***Key recommendations***

- The DoE, together with the Ministry of Blue Economy, and the Department of Forestry devise strategies to lobby for more fund allocation from the government budget for biodiversity.
- Zanzibar to develop its National Biodiversity Strategy and Action Plan (ZAPSAP) to ensure biodiversity is prioritized in respective sectors and in the government planning processes.
- More involvement of the private sector in biodiversity conservation planning and monitoring.
- For the BER exercise to be replicable and sustainable, the following points of action are recommended:
- BIOFIN can be used as a platform for capacity building for the staff of DoE, and to set a stage for mainstreaming biodiversity financing tracking in regular DoE plans for sustainability.
- A thorough review of attributions of biodiversity expenditure to the budget items in the Zanzibar context is needed to maintain consistency and replicability of the BER exercise.
- The DoE to initiate a biodiversity expenditure reporting framework, whereby MDAs, NGOs, and the private sector share data related to biodiversity expenditure. This may require a biodiversity financing tracking focal person to coordinate the exercise.

To reduce the reliance on unpredictable donor funding, the options could include:

- Ring-fencing a portion of funds collected from businesses benefitting from biodiversity resources for conservation activities. It is currently done for fees collected from the forest and marine conserved areas. This can be extended to tourism and fisheries businesses.
- Increasing capacity of biodiversity-related sectors for writing proposals and securing long-term financing for biodiversity conservation from both local and international sources.
- Establishing biodiversity financing mechanisms/solutions whereby the private sector and international organizations can pool resources to support biodiversity conservation.

- Increasing efficiency of the systems that are used for collection of tourists entry fees into marine and forest protected areas. The cashless payment systems at the tourist's entry points are useful.
- Conduct willingness to pay studies for entry fees into MCAs and PAs. Currently, the entry fees for foreign visitors are USD 3- USD 5. This fee is much less compared to fees charged for entrance into the national parks in Tanzania mainland.
- For the Ministry of Blue Economy and Fisheries to build capacity for sustainable deep-sea fishing.
- Take Chumbe Marine Park as a good business case for Public Private Partnership (PPP) in marine conservation.

***c) Key issues/findings and recommendations from the FNA report***

***Key issues***

- It was found that there is a substantial amount of expenditure going for benefit sharing in the MCAs and forest reserves. However, this expenditure was not captured in the government budgets. Likewise, the biodiversity financing needs for the communities were not captured during the FNA.
- There were no Biodiversity Strategy and Action Plan (ZABSAP) specific for Zanzibar. The FNA was done based on identified national biodiversity targets.
- There were challenges in data availability and completeness of data from both public and private sector entities. For public entities, data was available but, in some cases, it required extraction from multiple sources such as published budget data, departments' Medium Term Expenditure Framework (MTEF), and budget speeches read in the parliament.

***Key findings***

- The FNA identified 18 biodiversity targets which were coasted. The timespan for the projections was taken to be five years, therefore projections were made up to 2027/28.
- The projected biodiversity financing needs identified for the 2023/24 to 2027/28 period amounts to TZS 160.34 billion (USD 69.4million). The financing needs by targets are provided in Table 5.
- The financing gap for the five years was estimated to be TZS 100.28 billion (USD 43.41 million). 80% of the gap was attributed to biodiversity and development planning.

***Key recommendations***

- To establish a national/inter-ministerial committee to develop and monitor implementation of the ZABSAP, in line with the prioritized Finance Solutions.
- Since the participation of the non-government entities and willing to share financial data in the FNA exercise were limited the government has to have closer engagements with non-government entities. This would make them understand that they are an integral part of the biodiversity management efforts.
- If the FNA is adopted as one of the inputs into the government planning and budgeting exercise, it will help in the efficient allocation of resources required to achieve national biodiversity targets. The government, therefore, need to mainstream the expected ZABSAP into the national budget process.

**Table 5: Projected biodiversity financing needs by biodiversity targets**

| Target | | Amount (TZS) ("000, 000") |
|---|---|---|
| Target 1 | By 2028 at least 20% of the population is aware of the importance of biodiversity and its impact on human wellbeing and socio-economic development of Zanzibar. | 3,988,536,500 |
| Target 2 | By 2028, Programmes for the valuation of biodiversity and payments for ecosystem services in 5 terrestrial and 3 marine biodiversity ecosystems developed and integrated into national and local development strategies and plans. | 19,580,671,500 |
| Target 3 | By 2028, incentives harmful to biodiversity are eliminated, phased out or reformed and positive incentives for conservation and sustainable use of biodiversity are developed and applied. | 1,852,232,500 |
| Target 4 | By 2028, investments in systems of production and consumption based on sustainable eco-friendly practices increased. | 35,664,634,300 |
| Target 5 | By 2028, the rate of degradation and fragmentation of ecosystems and the loss of habitats is significantly reduced. | 23,891,842,000 |
| Target 6 | By 2028, at least three biodiversity related policies are reviewed and enforced | 9,612,694,000 |
| Target 7 | By 2028, all forms of pollution from water and land-based activities are brought to levels that are non-detrimental to biodiversity ecosystem functions. | 24,212,708,000 |
| Target 8 | By 2028, priority invasive alien species are identified, and control measures are in place and implemented. | 6,355,362,000 |
| Target 9 | By 2028, the multiple anthropogenic pressure on coral reef, and vulnerable ecosystems impacted by climatic change. | 5,127,388,500 |
| Target 10 | By 2028, three -five species that require special attention are effectively managed for long-term sustainability. | 5,477,810,000 |
| Target 11 | By 2028, strategies to reduce genetic erosion are developed and implemented to maintain the genetic diversity of cultivated plants, farmed and domesticated animals and their wild relatives. | 3,555,305,000 |
| Target 12 | By 2028, ecosystems that provide essential services that contribute to health, livelihoods and well-being are restored and safeguarded taking into account the needs of women, and local and vulnerable communities. | 8,158,365,000 |
| Target 13 | By 2028, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced. | 2,656,745,000 |
| Target 14 | By 2028, Fair and Equitable Benefit Sharing arising from the utilization of biodiversity resources is in force and operational, consistent with national and international legislation | 256,425,000 |
| Target 15 | By 2028, Zanzibar Biodiversity Strategy and Action Plan - ZABSAP is developed and implemented with effective participation | 976,885,000 |
| Target 16 | By 2028, traditional knowledge and practices relevant for the conservation and sustainable use of biodiversity recognized and promoted | 282,490,000 |
| Target 17 | By 2026, significant increase in the contribution of knowledge, technology and scientifically based information generated and shared | 7,618,585,000 |
| Target 18 | By 2026, financial resources in support of biodiversity programmes significantly increased | 1,075,451,000 |
| **Total** | | **160,344,130,300** |

### *3.1.2 Summary of the Plan's goals and targets*

Zanzibar's biodiversity Targets are built on five strategic goals namely; to 1) Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society, 2) Reduce the direct pressures on biodiversity and promote sustainable use, 3) Improve the status of biodiversity by safeguarding ecosystems, species, and genetic diversity, 4) Enhance the benefits to all from biodiversity and ecosystem services, and 5) Enhance participatory planning and implementation, knowledge management and capacity building (Table 6 and 7).

**Table 6: Biodiversity Strategic Objectives/Goals and Targets**

| Strategic Objective/ Goal | NBSAP & Aichi Targets | Targets by 2026 |
|---|---|---|
| 1. Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and Society | Aichi Targets 1-4 | 1) By 2026 at least 20% of the population is aware of the importance of biodiversity and its impact on human wellbeing and socio-economic development of Zanzibar<br>2) By 2026, Programmes for valuation of biodiversity and payments for ecosystem services developed and integrated into sector development strategies and plans<br>3) By 2026, incentives harmful to biodiversity are eliminated, phased out or reformed and positive incentives for conservation and sustainable use of biodiversity are developed and applied<br>4) By 2026 investments in systems of production and consumption based on sustainable eco-friendly practices increased |
| 2. Reduce the direct pressures on biodiversity and promote sustainable use | Targets 5-9 | 5) By 2026, the rate of degradation and fragmentation of ecosystems and the loss of habitats is significantly reduced<br>6) By 2026, at least nine biodiversity-related policies and Legislations are developed, reviewed, and enforced<br>7) By 2026, all forms of pollution from water and land-based activities are brought to levels that are non-detrimental to biodiversity-ecosystem functions<br>8) By 2026, priority invasive alien species are identified and control measures are in place and implemented<br>9) By 2026, the multiple anthropogenic pressure on coral reefs, and vulnerable ecosystems impacted by the climatic change are minimized |
| 3. Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity | Targets 10-11 | 10) By 2026, five species that require special attention are effectively managed for long-term sustainability<br>11) By 2026, strategies to reduce genetic erosion are developed and implemented to maintain the genetic diversity of cultivated plants, farmed and domesticated animals, and their wild relatives |
| 4. Enhance the benefits to all from biodiversity and ecosystem services | Targets 12-14 | 12) By 2026, ecosystems that provide essential services that contribute to health, livelihoods, and well-being are restored and safeguarded taking into account the needs of women, local and vulnerable communities<br>13) By 2026, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced<br>14) By 2026, Fair and Equitable Benefit Sharing arising from the utilization of biodiversity resources is in force and operational, consistent with national and international legislation |
| 5. Enhance implementation through participatory planning, knowledge management and capacity building | Targets 15-18 | 15) By 2026, Zanzibar Biodiversity Strategy and Action Plan - ZABSAP is developed and implemented with effective participation<br>16) By 2026, traditional knowledge and practices relevant for the conservation and sustainable use of biodiversity respected and safeguarded<br>17) By 2026, a significant increase in the contribution of knowledge, technology and scientifically-based information generated and shared<br>18) By 2026, financial resources in support of biodiversity programs significantly increased |

## 3.2 BER and FNA components as the methodological basis for the BFP

The BFP process was anchored to the BER and FNA phases where the biodiversity expenditures, financial gaps and finance needs for sustainable biodiversity conservation were determined. The FNA phase generated important biodiversity targets, outcomes, outputs and activities in realizing biodiversity conservation goals in Zanzibar (Table 7).

**Table 7. Detailed biodiversity targets, outcomes, outputs and activities**

| Strategic Objectives | Target | Outcome | Outputs | Main Activities |
|---|---|---|---|---|
| 1. Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society | 1. By 2026 at least 20% of the population is aware of the importance of biodiversity and its impact on human wellbeing and socio-economic development of Zanzibar | Effective co-ordination of biodiversity priorities across government to deliver shared results | • Strengthened role of coordinating institution for biodiversity conservation | 1.1 Establish and facilitate multi stakeholder's forum<br>1.2 Build capacity of biodiversity-related sectors<br>1.3 Revise and harmonize roles and functions of biodiversity-related sectors Establish and facilitate multi stakeholder's forum |
| | | | • Implemented Zanzibar Environmental Education Strategy (ZEES) | 1.4 Develop guidelines for provision of Environmental Education in primary and vocational schools |
| | | | • Established, strengthened and implemented awareness programmes to promote and encourage the effective stakeholder participation in the stewardship of the biodiversity | 1.5 Prepare and air TV and Radio programmes<br>1.6 Organize biodiversity related exhibitions<br>1.7 Organize sensitization meetings including policy and decision makers |
| | | | • Mainstream biodiversity into all levels of education | 1.8 Facilitate biodiversity related clubs<br>1.9 Support curricula review by the Ministry of Education and Vocation Training<br>1.10 Conducting Training of Trainers (ToT) for environmental educators |
| | 2. By 2026, Programmes for the valuation of biodiversity and payments for ecosystem services developed and integrated into national and local development strategies and plans | Prioritized biodiversity in national/ sector plans and budgets | • Documented economic value of biodiversity to inform decision making | 2.1 Develop and institutionalize methodology and tools for economic valuation of biodiversity<br>2.2 Enhance institutional and human capacity on use of tools for biodiversity and ecosystem valuation<br>2.3 Resource assessment in key terrestrial biodiversity ecosystems- Jozani, Masingini, Kiwengwa, Ngezi and Msitu Mkuu<br>2.4 Undertake resource assessment in key marine biodiversity ecosystems- PECCA, CHABAMCA, MIMCA<br>2.5 Organize sensitization meetings including policy and decision makers |
| | 3. By 2026, incentives harmful to biodiversity are eliminated, phased out or reformed and positive incentives for conservation and sustainable use of biodiversity are developed and applied | Reduced pollution levels in the agriculture and tourism investments | • A comprehensive policy document and action plan on removal/reform of harmful subsidies | 3.1 Identify and characterize incentives which harm biodiversity and prepare plan for removal of harmful incentives<br>3.2 Remove, reform or phase- out harmful incentives<br>3.3 Implementation of the plan for promotion of biodiversity friendly incentives |
| | 4. By 2026, investments in systems of production and consumption based on sustainable eco-friendly practices increased | Biodiversity mainstreamed in eco-friendly investments | • Strengthened enforcement of policies and legislation related to investments and utilization of biodiversity | 4.1 Develop and make use of sustainable investment guidelines<br>4.2 Review of EIA guidelines<br>4.3 Enforce ESIA compliance<br>4.4 Procurement of vehicles and other equipment<br>4.5 Construction/ renovation of physical facilities for key institution in biodiversity management<br>4.6 Develop guidelines on sustainable production and consumption<br>4.7 Promote use of eco-friendly technologies in production<br>4.8 Promote eco- friendly consumption methods |

| Strategic Objectives | Target | Outcome | Outputs | Main Activities |
|---|---|---|---|---|
| 2. Reduce the direct pressures on biodiversity and promote sustainable use | 5. By 2026, the rate of degradation and fragmentation of ecosystems and the loss of habitats is significantly reduced | Increased area of protected/ secured biodiversity ecosystems | • Highly degraded/fragile areas assessed, mitigation plans developed and implemented terrestrial ecosystems | 5.1 Carry out environmental mapping to identify highly degraded/ fragile areas in terrestrial ecosystems and develop mitigation plans<br>5.2 Carry out environmental mapping to identify highly degraded/ fragile areas in marine ecosystems and develop mitigation plans<br>5.3 Promote and support effective land use management/spatial planning<br>5.4 Strengthen preventive measures against wild fires<br>5.5 Review and support implementation of management plans for forest and marine conservation areas<br>5.6 Support management of the established CoFMAs<br>5.7 Promote tree planting, establishment of wood lots and forest land restoration and conservation<br>5.8 Facilitate alternative IGAs for communities |
| | 6. By 2026, at least three biodiversity related policies are reviewed and enforced | Biodiversity conservation is prioritized in national plans and strategies | • Developed/reviewed and enforced policies and legislation to conserve aquatic and terrestrial resources | 6.1 Review of 3 policies related to biodiversity conservation<br>6.2 Preparation of policy implementation strategies<br>6.3 Implementation of strategies to conserve aquatic and terrestrial bio diversity |
| | 7. By 2026, all forms of pollution from water and land-based activities are brought to levels that are non-detrimental to biodiversity ecosystem functions | Effective application of biodiversity conservation safeguards and technologies | • Strengthened enforcement of legislation related to environmental pollution prevention and control in aquatic and terrestrial ecosystems | 7.1 Develop guidelines on petroleum waste management<br>7.2 Formulate liquid waste management Strategy and Action Plan<br>7.3 Implementing liquid and solid waste management strategy |
| | | | • Strengthened database and reporting system on municipal waste management | 7.4 Establish a waste management database in respective municipals |
| | | | • Developed and implemented national waste management Strategy and Action Plan | 7.5 Constitute waste management monitoring forums (annually) |
| | | | • Strengthened institutional and human capacity on pollution management | 7.6 Train staff in respective municipals, FVPO and Blue Economy on pollution management |
| | 8. By 2026, priority invasive alien species are identified and control measures are in place and implemented | Reduction in invasive species | • Relevant strategies to address Invasive Alien Species (IAS) management implemented | 8.1 Conduct an inventory of IAS and map (by species and coverage) the distribution of IAS in key ecosystems (marine and terrestrial)<br>8.2 Initiate integrated IAS management in key marine and terrestrial ecosystems |
| | | | • Established/ strengthened monitoring and evaluation system of IAS | 8.3 Develop monitoring and evaluation framework for IAS |
| | | | • Strengthen phytosanitary inspection and quarantine services at entry points | 8.4 Enforce phytosanitary inspection and control regulations in entry points |

| Strategic Objectives | Target | Outcome | Outputs | Main Activities |
|---|---|---|---|---|
| | | | • Develop and promote national, regional and international cooperation/ agreements on control of IAS | 8.5 Engage in regional dialogues in management of IAS and information sharing |
| | | | • Strengthened advocacy, public awareness and sensitization on IAS and their management | 8.6 Prepare and air TV and Radio programmes on IAS<br>8.7 Prepare and disseminate leaflets, brochures, banners and policy briefs |
| | 9. By 2026, the multiple anthropogenic pressure on coral reef, and vulnerable ecosystems impacted by climatic change | Increased participatory interventions that contribute to improving biodiversity conservation in critical ecosystems and the buffer zones | • Strengthened fisheries management along coral reefs and associated ecosystems | 9.1 Support coastal surveillance units/groups<br>9.2 Train and provide facilities for MCAs<br>9.3 Create awareness for coastal communities<br>9.4 Apply natural and artificial coral restoration techniques |
| | | | • Promoted Regional Cooperation related to coral reef conservation | 9.5 Participate in regional coral reef meetings |
| 3. Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity | 10. By 2026, three -five species that require special attention are effectively managed for long-term sustainability | Secured unique/ threatened species in key ecosystems and plant and animal species genetic diversity | • Assessment of endangered and rare species in key biodiversity areas and preparation of management intervention plan | 10.1 Assessment of endangered and rare species in key biodiversity areas and preparation of management intervention plan<br>10.2 Conduct stakeholders' awareness |
| | | | • Support conservation initiatives for endangered, rare and threatened species | 10.3 Facilitate endangered and rare species management interventions in Pas/MCAs |
| | 11 By 2026, strategies to reduce genetic erosion are developed and implemented to maintain genetic diversity of cultivated plants, farmed and domesticated animals and their wild relatives | | • Biodiversity safety strategy is developed and implemented | 11.1 Support implementation of Zanzibar bio safety strategy<br>11.2 Prepare SOPs for maintaining genetic diversity<br>11.3 Establish inventory of threatened genetic species of cultivated plants, farmed and domesticated animals including wild varieties<br>11.4 Establish gene bank for identified plants and animals |
| 4. Enhance the benefits to all from biodiversity and ecosystem services | 12. By 2026, ecosystems that provide essential services that contribute to health, livelihoods and well-being are restored and safeguarded taking into account the needs of women, local and vulnerable communities | Sustainable benefits secured from utilization of biodiversity resources | • Developed and implemented management programmes for critical watersheds, coral reefs, seagrass and forests | 12.1 Identify and undertake valuation of critical watersheds<br>12.2 Develop management programme for critical watersheds<br>12.3 Implement and monitor watershed management program<br>12.4 Conduct monitoring control and surveillance on forests<br>12.5 Establish mangrove and seagrass nurseries and planting |
| | 13. By 2026, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced | Enhanced habitats and key biodiversity ecosystems with increased climate-resilience | • Enforced policies, strategies and plans that build biodiversity resilience to impacts of climate change | 13.1 Conduct awareness on relevant policies, strategies and plans that build biodiversity resilience to impacts of climate change and carbon markets |

| Strategic Objectives | Target | Outcome | Outputs | Main Activities |
|---|---|---|---|---|
| | | | • Supported tree planting, establishment of woodlots and forest land restoration programmes for carbon markets | 13.2 Establish woodlots and plantation for carbon markets<br>13.3 Manage natural forests for carbon markets<br>13.4 Support governance processes to access carbon money |
| | 14. By 2026, Fair and Equitable Benefit Sharing arising from the utilization of biodiversity resources is in force and operational, consistent with national and international legislation | Enhanced national and local incomes and benefits from biodiversity resources | • Established and implemented regulations and guidelines for Access and Benefit Sharing | 14.1 Develop/ Review Access and Benefit Sharing regulations/guidelines |
| | | | • Established mechanisms to ensure benefits from transfer of genetic resources | 14.2 Develop national guidelines that comply with international convention and protocol<br>14.3 Develop awareness programme on genetic resources |
| 5. Enhance implementation through participatory planning, knowledge management and capacity building | 15. By 2026, Zanzibar Biodiversity Strategy and Action Plan - ZABSAP is developed and implemented with effective participation | Coordinated biodiversity management with effective fundraising strategy | • Developed and implemented ZABSAP | 15.1 Develop ZABSAP<br>15.2 Mainstream ZABSAP biodiversity targets into sectoral and Local Government levels plans and budgets<br>15.3 Coordinate and monitor implementation of ZABSAP |
| | 16. By 2026, traditional knowledge and practices relevant for the conservation and sustainable use of biodiversity recognized and promoted | Biodiversity conservation integrates traditional knowledge | • Promoted use of traditional knowledge that enhance biodiversity conservation | 16.1 Identify and document traditional knowledge that support biodiversity management<br>16.2 Support the use of traditional knowledge (e.g., forests, marine) that benefit biodiversity conservation |
| | 17. By 2026, significant increase in the contribution of knowledge, technology and scientifically based information generated and shared | Biodiversity planning based on scientific knowledge | • Produced knowledge, technology and scientifically based information to support decision making on issues related to biodiversity | 17.1 Develop biodiversity related research agenda<br>17.2 Training on undertaking biodiversity targeted research<br>17.3 Facilitation of writing fundable proposals |
| | 18. By 2026, financial resources in support of biodiversity programmes significantly increased | Increased funding base for ZABSAP implementation | • Increased access to financial resources for biodiversity conservation | 18.1 Develop partnerships with regional and international organizations on biodiversity issues<br>18.1 Explore and implement resource mobilization strategy to increase biodiversity funding |

## 3.3 Identification, screening and prioritization of Finance Solutions (FSs)

### 3.3.1 The consultative process

The process for identification, screening and prioritization of the biodiversity finance solutions (FSs) was consultative in nature to ensure quality and ownership of the products. It involved the Zanzibar BIOFIN Technical Committee members and representative experts from the public sectors directly or indirectly contributing to biodiversity conservation. Direct consultations and workshops were conducted to ensure collection of adequate and reliable data and information.

The process comprised of a serial flow of four key steps: i) step 1 aiming to generate a long list of FSs; ii) step 2 for prioritization of the listed FSs comprising of rapid and detailed screening stages. This step went through three sub-steps (rapid and detailed screening, and stakeholders' engagement); iii) step 3 focused on linking prioritized FSs with biodiversity targets; and iv) step 4 providing a detailed description of the prioritized FSs as per the BIOFIN WorkBook of 2018.

**Step 1: Preliminary list of FSs**

The preliminary list of FSs was obtained using the approach provided in the BIOFIN Workbook of 2018. The team undertook the preliminary process, scrutinized and generated a list of 47 finance solutions relevant to Zanzibar from the BIOFIN Catalogue of Finance Solutions provided in the Workbook and existing finance solution identified in the PIR report (Annex 4; Table A4.1). Experiences on FSs from other BIOFIN countries were also explored and contextualized to Zanzibar environment. Additional information was provided considering results-based category as elaborated in the BIOFIN WorkBook of 2018: *I) generate additional revenue, II) avoid future biodiversity expenditure, III) ensure better spending of the financial resources, and/or IV) realign current biodiversity expenditures.*

**Step 2: Prioritization of FSs**

The obtained preliminary list of 47 finance solutions relevant to Zanzibar were subjected to rapid and detailed screening steps to obtain the most prioritized FSs (Annex 4 Table A4.1) as described below.

**Step 2.1. Rapid screening**

The consultants and technical representatives from relevant departments who participated in the technical workshops held at Jambian, Zanzibar (8th – 13th September, 2021) for BER and FNA, scrutinized and screened the 47 FSs towards the detailed screening step. The team used a 0 to 4-point scale for three criteria groups as per the guidelines provided in BIOFIN Workbook (2018):

- Potential for biodiversity impact: potential of the FS to create impacts on sustainable development and biodiversity conservation at a significant level.
- Scale of financial opportunity/financial scale and sustainability: how much, how long, and how stable/sustainable is the FS?
- Political feasibility and the likelihood of technical, social and political success.

This step generated 36 finance solutions indicated in Annex 4 Table A4.2 that were further subjected to the detailed screening step.

**Step 2.2 Detailed screening**

The detailed screening process used the criteria and scoring guidance provided in the workbook (2018) to screen the 36 FSs. This step prioritized the 15 most feasible finance solutions, as serially listed (1 – 15) in Table 8 below. The screening criteria used 20 guiding questions each with indicative scores (0-4), all summing up to a total of 80 points. The total scores for each FS obtained from all the scorers (13 individuals) were computed for the average scores (x/80) each (Table 8 and Annex 4 Table A4.3).

**Table 8. Scores of the screened and prioritized finance solutions (1- 15)**

| Scoring S# | Finance Solutions | Total Score | Average (X/80) | Selected (15) |
|---|---|---|---|---|
| 1 | Crowdfunding for Community Forest Management Areas (CoFMAs) | 665 | 55 | Yes |
| 2 | Establish PES Programme for community-based forests (CoFMAs) | 653 | 54 | Yes |
| 3 | Re-investment of portions of revenues generated from biodiversity to conservation | 645 | 54 | Yes |
| 4 | Provide subsidies for sustainable fishing gears (nets, boats for deep sea) | 634 | 53 | Yes |
| 5 | Tree seedlings and planting | 633 | 53 | Yes |
| 6 | Royalties in deep sea fisheries | 630 | 53 | Yes |
| 7 | Subsidize sustainable seaweed farming | 628 | 52 | Yes |
| 8 | Secure Debt-for-nature swaps for BLUE economy implementation* | 626 | 52 | Yes |
| 9 | Re-investment of fees and charges from tourism for beach and coastal management | 625 | 52 | Yes |
| 10 | Establish Blue Economy Fund | 607 | 51 | Yes |
| 11 | Review for appropriate penalties and other compensation for unplanned environmental damage | 606 | 51 | Yes |
| 12 | Establish crowdfunding for restoration of degraded coastal and beach areas: Forestry/Habitats (selected strategic areas) | 597 | 50 | Yes |
| 13 | Establish a program for scaling up of REDD+ initiatives | 591 | 49 | Yes |
| 14 | Provide subsidies for clean energy sources (gas and electricity) for household energy | 587 | 49 | Yes |
| 15 | Corporate social responsibility (CSR) | 586 | 49 | Yes |
| 16 | Secure debt-for-nature swaps for Coral reefs restoration** | 583 | 49 | Yes |
| 17 | Secure debt-for-nature swaps for mangroves restoration and protection capacity | 578 | 48 | No |
| 18 | Re-investment of portions of revenues generated from penalties/charges on offences related to illegal off-take of biodiversity resources (illegal logging, fishing and wildlife trade) | 577 | 48 | No |
| 19 | Re-investment of portion revenues from commercial fishing to conservation | 573 | 48 | No |
| 20 | Re-distribution of sand-mining fees for habitats restoration | 566 | 47 | No |
| 21 | Establish Green/Sustainability Revolving Funds in sustainable fisheries | 561 | 47 | No |
| 22 | Promote Carbon markets | 553 | 46 | No |
| 23 | Subsidize organic farming of key crops (clove, nutmeg, cardamom, turmeric, cinnamon, chili, and black pepper) | 552 | 46 | No |
| 24 | Establish Green/Sustainability Revolving Funds for community-based ecotourism in CoFMAs | 550 | 46 | No |
| 25 | Establish Green/Sustainability Revolving Funds for coastal community-based Seaweed farming | 550 | 46 | No |
| 26 | Establish crowdfunding for Mangrove restoration and protection | 549 | 46 | No |
| 27 | Establish crowdfunding for endangered species (to be selected): Ader's Duiker (Cephalophus adersi), Pemba Flying fox (Pteropus voelzkowi), Zanzibar red colobus (Piliocolobus kirkii), and Blue duiker (Cephalophus monticola sundevalli) | 546 | 46 | No |
| 28 | Enforce environmental offsets | 534 | 45 | No |
| 29 | Investment incentives to biodiversity/environmental responsible investors | 530 | 44 | No |
| 30 | Establish crowdfunding for terrestrial forestry restorations (selected strategic areas, e.g. corridors, buffer zones, etc) | 529 | 44 | No |
| 31 | Biosafety fee | 521 | 43 | No |
| 32 | Ecological fiscal-transfer | 520 | 43 | No |
| 33 | Promote Impact investments | 518 | 43 | No |
| 34 | Remove harmful subsidies | 489 | 41 | No |
| 35 | Sustainable Bio-trade finance | 472 | 39 | No |
| 36 | Establish PES Programme for qualifying private Forests | 436 | 36 | No |

***Note**: *&**These finance solutions were combined, hence remaining with 15 prioritized Finance solutions (1 – 15).*

**Step 2.3 Stakeholders consultations**

Stakeholders' consultations and engagement platforms included the technical workshops held at Sunrise Villa, Jambian (8th -13th September, 2021 and 11th – 14th October, 2021) comprising key technical experts from the biodiversity-related departments. The workshops participants included representatives from the President's Office - Finance and Planning (PO-FP), Zanzibar Planning Commission, Ministry of Blue Economy and Fisheries, Ministry of Agriculture, Natural Resources and Livestock, Department of Forestry & Non-Renewable Natural Resources, Division of Environment, Zanzibar Environment Management Authority, Zanzibar Water Authority, First Vice President's Office - Department of Environment and Department of Marine Conservation (DMC) (Annexes 3.1-3.2a and 3.2b). The private sector engagement workshop held at Serena Hotel on 8th December 2021 for their inputs brought together diverse participants from the private sector and CSOs (Annexes 3.3b and 3.3c).

The prioritized FSs (15) were further checked and scrutinized for clarity and appropriate naming based on various inputs provided by BIOFIN Technical advisors, and BIOFIN Team members during Zoom meetings, through emails and consultations. The whole process generated a final list of 13 prioritized Finance Solutions (FSs) for inclusion in this BFP (Box 3).

**Box 3: Final List of prioritized 13 Finance Solutions in a serial order**

1. Crowdfunding for Community Forest Management Areas (CoFMAs)
2. Establish Payment for Ecosystem Services (PES) Programme for CoFMAs and other forests generating significant water ecosystem service
3. Repurposing subsidies in the fisheries sector
4. Establish and operationalize public-private partnership framework for "Re-greening Zanzibar Program" (coastal and inland areas) and coral reefs restorations
5. Repurposing subsidies for sustainable seaweed farming
6. Secure Debt-for-nature swaps for sustainable BLUE economy (coral reefs restoration)
7. Establish Blue Fund for BLUE Economy implementation
8. Establish crowdfunding for restoration of degraded coastal and beach areas
9. Identify and develop a new program for scaling up of REDD+ initiatives
10. Introduce subsidies for clean energy sources (gas and electricity) for household energy
11. Increase Corporate social responsibility (CSR) contributions from the private sector for biodiversity conservation
12. Reform tourist's entrance fee structure for protected areas and adopt a Digital Voucher System for the fees collection
13. Review and strengthen the revenue retention framework/Scheme for the PAs (MCAs)

**Step 3: Linking prioritized FSs with biodiversity targets**

The final list of 13 prioritized FSs were linked with biodiversity targets to ascertain their synergistic contributions towards achieving the targets and strategic objectives in biodiversity conservation. In the process, it was found that each prioritized FS would contribute directly and/or indirectly to achievement of more than one target inferred from the targets' outcomes (Table 9 and Annex 4 Table A4.4). However, one FS may contribute to achievement of few biodiversity targets yet potentially having significant positive impacts to biodiversity conservation, community and the national economy at large.

**Table 9. Potential contributions of FS to different biodiversity targets**

| Biodiversity Targets attributed to each FS | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FSs*** | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | Total |
| 1 | 1 | | | 1 | 1 | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 12 |
| 2 | 1 | 1 | | 1 | 1 | | | | 1 | | 1 | 1 | 1 | 1 | 1 | | | 1 | 11 |
| 3 | 1 | | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | | | 1 | 12 |
| 4 | 1 | | | 1 | 1 | | | | | | | 1 | 1 | | 1 | | 1 | 1 | 8 |
| 5 | 1 | 1 | 1 | 1 | | | | | 1 | | | 1 | 1 | | 1 | 1 | 1 | 1 | 11 |
| 6 | | | | | | | | | | 1 | | | | | 1 | | | 1 | 3 |
| 7 | | | | 1 | | | | | | | | 1 | | | 1 | | | 1 | 4 |
| 8 | 1 | | | | 1 | | | | 1 | | | 1 | 1 | | 1 | | | 1 | 7 |
| 9 | 1 | 1 | | | 1 | 1 | 1 | | 1 | | | 1 | | | 1 | 1 | 1 | 1 | 11 |
| 10 | 1 | | 1 | 1 | 1 | | | | 1 | | | 1 | 1 | | 1 | 1 | 1 | 1 | 11 |
| 11 | 1 | 1 | | | 1 | | 1 | | 1 | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 12 | 1 | | 1 | | 1 | 1 | | | 1 | 1 | 1 | 1 | | 1 | 1 | | | 1 | 11 |
| 13 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | | 1 | | | 1 | 13 |
| Total | 11 | 5 | 5 | 6 | 10 | 4 | 4 | 2 | 10 | 5 | 4 | 12 | 8 | 4 | 13 | 5 | 5 | 13 | 126 |

**The FSs are listed in Box 3 above; **The targets are summarized in Table 10 below*

The prioritized 13FSs were further linked with the strategic objectives, which also linked to the biodiversity Targets by 2026 (Table 10).

**Table 10. Finance Solutions linked to strategic objectives and Aichi biodiversity targets**

| Strategic Objective | | NBSAP, Other Strategies and Plans | | |
|---|---|---|---|---|
| | **URT – NBSAP & Aichi Targets** | **Targets by 2026** | | **FS (*Table 12 above*)** |
| 1. | Address the underlying causes of Biodiversity loss by mainstreaming biodiversity across government and Society | Aichi Targets 1-4 | 1. By 2026 at least 20% of the population is aware of the importance of biodiversity and its impact on human wellbeing and socio-economic development of Zanzibar | 1, 2, 3, 4, 5, 8, 9, 10, 11, 12 & 13 |
| | | | 2. By 2026, Programmes for valuation of biodiversity and payments for ecosystem services developed and integrated into sector development strategies and plans | 2, 5, 9, 11 & 13 |
| | | | 3. By 2026, incentives harmful to biodiversity are eliminated, phased out or reformed and positive incentives for conservation and sustainable use of biodiversity are developed and applied | 3, 5, 10, 12 & 13 |
| | | | 4. By 2026 investments in systems of production and consumption based on sustainable eco-friendly practices increased | 1, 2, 4, 5, 7 & 10 |
| 2. | Reduce the direct pressures on biodiversity and promote sustainable use | Targets 5-9 | 5. By 2026, the rate of degradation and fragmentation of ecosystems and the loss of habitats is significantly reduced | 1, 2, 3, 4, 8, 9,10, 11, 12 & 13 |
| | | | 6. By 2026, at least nine biodiversity related policies and Legislations are developed, reviewed and enforced | 3, 9, 12 & 13 |
| | | | 7. By 2026, all forms of pollution from water and land-based activities are brought to levels that are non-detrimental to biodiversity ecosystem functions | 3, 9, 11 & 13 |
| | | | 8. By 2026, priority invasive alien species are identified and control measures are in place and implemented | 3 & 13 |
| | | | 9. By 2026, the multiple anthropogenic pressure on coral reef, and vulnerable ecosystems impacted by climatic change are minimized | 1, 2, 3, 5, 8, 9, 10, 11, 12, & 13 |
| 3. | Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity | Targets 10-11 | 10. By 2026, at least three to five species that require special attention are effectively managed for long-term sustainability | 1, 3, 6, 12 & 13 |
| | | | 11. By 2026, strategies to reduce genetic erosion are developed and implemented to maintain genetic diversity of cultivated plants, farmed and domesticated animals and their wild relatives | 1, 2, 3 & 12 |
| 4. | Enhance the benefits to all from biodiversity and ecosystem services | Targets 12-14 | 12. By 2026, ecosystems that provide essential services that contribute to health, livelihoods and well-being are restored and safeguarded taking into account the needs of women, local and vulnerable communities | 1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 12 & 13 |
| | | | 13. By 2026, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced | 1, 2, 4, 5, 8, 10, 11 & 13 |
| | | | 14. By 2026, Fair and Equitable Benefit Sharing arising from utilization of biodiversity resource is in force and operational, consistent with national and international legislations | 1, 2, 11 & 12 |
| 5. | Enhance implementation through participatory planning, knowledge management and capacity building | Targets 15-18 | 15. By 2026, Zanzibar Biodiversity Strategy and Action Plan - ZABSAP is developed and implemented with effective participation | All FSs (1-13) |
| | | | 16. By 2026, traditional knowledge and practices relevant for the conservation and sustainable use of biodiversity respected and safeguarded | 1, 5, 9, 10 & 11 |
| | | | 17. By 2026, significant increase in the contribution of knowledge, technology and scientifically based information generated and shared | 4, 5, 9, 10, 11 & 13 |
| | | | 18. By 2026, financial resources in support of biodiversity programmes significantly increased | All FSs (1-13) |

### 3.3.2 Summarizing the prioritized Finance Solutions

The summary description for each prioritized FSs was generated in accordance with the BIOFIN WorkBook (2018). The 13 prioritized finance solutions are summarized in Table 11 based on the scoring order, indicating key attributes provided in the WorkBook for each:

i) possible sources,

ii) managing/lead agent or intermediaries/departments,

iii) instruments/mechanisms to mobilize, collect, manage and disburse the funding,

iv) desired finance results (generate additional revenue, avoid future biodiversity expenditure, ensures better spending of the financial resources, and/or realigns current biodiversity expenditures), and

v) beneficiaries or principal stakeholders.

**Table 11. Summary of the prioritized finance solutions with their initial prioritization serial #s in brackets**

| S# | FS | Managing/ Lead Agent or Intermediaries/ Departments | Instruments/Mechanisms to Mobilize, Collect, Manage and Disburse the Funding | Desired Finance Results | Beneficiaries or Principal Stakeholders |
|---|---|---|---|---|---|
| 1 | Crowdfunding for Community Forest Management Areas (CoFMAs), (P1) | DFNRNR & MoF&P | **Mobilization/Collection:** Crowdfunding campaigns<br>**Management/Disbursement:** Through MoF&P (Budget codes, results-oriented budget, and disbursements, M&E) | Generates additional revenue. | DFNRNR, Department of Tourism, DoE, COFMA Associations, Communities (Shehias), MoF&P |
| 2 | Establish Payment for Ecosystem Services (PES) Programme for CoFMAs (P2) | DFNRNR & MoF&P | **Mobilization/Collection:** PES contracts, biodiversity-and-livelihoods focused contracts<br>**Management/Disbursement:** Through MoF&P, appropriate budget allocation (Budget codes, results-oriented budget) and disbursements, M & E | Generate additional revenue, and avoid future biodiversity expenditure | Local communities (Shehias), COFMA Associations, private sector involved, DFNRNR, DoE, MoF&P |
| 3 | Repurposively "Bluing" subsidies in the fisheries sector (P4) | MoBE&F and MoF&P) | **Mobilization/collection:** Lobbying to national and international finance agencies and Donors, private sector<br>**Management/Disbursement:** Policy, Regulations and Strategic Action Plans for appropriate use of the subsidies. Through MoF&P, M&E | Generates additional revenue, avoids future biodiversity expenditure, and realigns current biodiversity expenditures | DoF, DoT, Fishing communities, Investors, MoBE&F, MoF&P |
| 4 | Establish and operationalize public-private partnership (PPP) framework for "Re-greening Zanzibar Program" (coastal and inland areas), (P5) | DFNRNR & MoF&P) | **Mobilization/collection:** Partners, key stakeholders, etc.<br>**Management/Disbursement:** Agreements, by-laws and guidelines for PPP, M&E Framework, overseen by MoF&P | Avoids future biodiversity expenditure, and realigns current biodiversity expenditures | Potential partners, DFNRNR, DoE, DoT, MNRNRR, MoF&P, the public |
| 5 | Repurposing subsidies for sustainable seaweed farming (P7) | Depart of Fisheries (MoBE&F) and MoF&P) | **Mobilization/collection:** Lobbying to national and international finance agencies and Donors **Management/ Disbursement:** Policy, Regulations and Strategic Action Plans for appropriate use of the subsidies. Through MoF&P, and M&E | Generates additional revenue, avoids future biodiversity expenditure, and realigns current biodiversity expenditures | DoF, DoE, coastal communities especially Women groups, , MoBE&F, MoF&P |
| 6 | Secure Debt-for-nature swaps for sustainable BLUE economy (coral reefs restoration), (P8) | MoBE&F and MoF&P | **Mobilization/Collection:** RGZ lobbying to national and international finance agencies and Donors for earmarked debts-for-nature swamp<br>**Management/Disbursement:** Through MoF&P, appropriate budget re-allocation for BLUE economy, for coral reefs (Budget codes, results-oriented budget and disbursements); Policy, Regulations and Strategic Action Plans for appropriate use of the Dept-for-nature swaps | Generates additional revenue and realigns current biodiversity expenditures | DoF, DoT, Fishing communities and companies, MoBE&F, MoF&P |
| 7 | Establish Blue Fund for BLUE Economy implementation (P10) | MoBE&F and MoF&P | **Mobilization/collection:** i) Lobbying to national and international finance agencies for seed monies from NGOs and donors; ii) Quota shares by fishing companies: to communities; fisheries association; MCAs for spawning areas<br>**Management/Disbursement:** Board of Trustees, Respective Policy, Regulations, Strategic Action Plans, Plans; Through MoF&P (Budget codes, results-oriented budget and disbursements, M&E) | Generates additional finance resourcs, ensures better spending of the financial resources, and realigns current biodiversity expenditures | MoBE&F, DFNRNR, DoT, Fishing communities, investors & MoF&P |

| S# | FS | Managing/ Lead Agent or Intermediaries/ Departments | Instruments/Mechanisms to Mobilize, Collect, Manage and Disburse the Funding | Desired Finance Results | Beneficiaries or Principal Stakeholders |
|---|---|---|---|---|---|
| 8 | Establish crowdfunding for restoration of degraded coastal and beach areas (P12) | DoE (FVPO), DFNRNR (MANRL), & MoF&P | **Mobilization/Collection:** Crowdfunding campaigns and collection platforms in agreements<br>**Management/Disbursement:** clear disbursement and utilization arrangements; agreement with the CF platform and partners; overseen by the MoF&P; M&E. | Generates additional finance resources for biodiversity | DoE (FVPO), DFNRNR (MANRL), Department of Tourism, MoF&P, Tourism investors, the general public |
| 9 | Identify and develop a new program for scaling up of REDD+ initiatives (P13) | DoE (FVPO), DFNRNR (MAINL) & MoF&P | **Mobilization/Collection**: mixed approach: i) finance and non-finance mechanisms) e.g PPP, volunteers, bolstering the morale and effectiveness of disappointed partners; ii) drawing on a complex set of multilaterals, bilateral, private, corporate, and foundation for financial sources/aids; etc.<br>Management**/Disbursement:** strengthening institutional set up, good governance (Policy, Regulations, Strategic Action Plans, M&E). | Generates additional revenue/ finance resource, avoids future biodiversity expenditure and ensures better spending of the financial resources | DoE, VPO, MoF&P, MANL, communities/ Shehias/COFMAs |
| 10 | Introduce subsidies for clean energy sources (gas and electricity) for household energy (P14) | DoE (FVPO), Department of Energy and Minerals (Ministry of Water and Energy), and MoF&P | **Mobilization/Collection:** Royalties paid by Oil and Gas drilling companies and Investors in MPAs; Lobbying to national and international finance agencies and Donors<br>**Management/Disbursement:** Through MoF&P **(**Budget codes, results-oriented budget and disbursements, M&E); Policy, Regulations and Strategic Action Plans | Avoids future biodiversity expenditure and ensures better spending of the financial resources | Zanzibar community, Department of Energy and Minerals (DoE&M), DoE&M (Ministry of Lands, Water, Energy and Environment), ZECO, MoF&P) |
| 11 | Increase Corporate social responsibility (CSR) contributions from the private- sector for biodiversity conservation (P15) | MoF&P, DoE (FVPO), Department of Tourism | **Mobilization/Collection:** funding charitable activities and/or corporate foundations donations contributing to biodiversity conservation;<br>**Management/Disbursement:** Respective, Regulations, guidelines, M&E | Generates additional revenue/finance resources for biodiversity-focused community projects | Communities, DoE (FVPO), MANRL, Department of Tourism, MoF&P |
| 12 | Reform tourist's entrance fee structure for protected areas and adopt a Digital Voucher System for the fees collection | MoBE&F, MAINRL and MoF&P | **Mobilization/Collection:** Through the revised fee structure, adherence of Tour Operators, MCA/PA Managers, Tour Operators<br>**Management/Disbursement:** Effective Regulations and Guidelines, Manuals, M&E | Additional revenue, better delivery, and realignment of expenditures. | DoT, Commission of Tourism, MoBE&F, MAINRL, MoF&P, Tour Operators/Tourism-related Investors, MCA/ PA Management, Tour Guides Associations |
| 13 | Review and strengthen the revenue retention framework/ Scheme for the MCAs/PAs | MoBE&F, MAINRL and MoF&P | **Mobilization/Collection: Effective and efficient collection mechanism in place for the MCA/PA under the retention scheme**<br>**Management/Disbursement:** Effective, Regulations, Guidelines/Manuals, M&E | Additional revenue, better delivery, and realignment of expenditures. | DoT, Commission of Tourism, MoBE&F, MAINRL, MoF&P, Tour Operators/Tourism-related Investors, MCA/ PA Management, |

### 3.3.3 Linking the prioritized FSs with Blue Economy implementation strategies and Climate Change Fund Thematic Areas

Further analysis acknowledged that each prioritized FS is well-linked to at least one sector-specific strategy such as Blue Economy and Climate Change Fund (CCF) thematic area. Below are the Blue Economy implementation strategies and Climate Change Fund (CCF) thematic areas linked to prioritized Finance Solutions (Table 12 and Box 4).

**Table 12. FSs linked to BE implementation strategies and Climate Change Fund Thematic Areas**

| S# | Prioritized BIOFIN Finance Solutions | Blue Economy Implementation Strategies* | | CCF *(Thematic Areas linked with the FS)** | |
|---|---|---|---|---|---|
| 1 | *Crowdfunding for Community Forest Management Areas (CoFMAs)* | | | ✓ | 1 (c & e); 2 (b) |
| | *An increase of forests increases biodiversity and the carbon sink* | | | | |
| 2 | *Establish PES Programme for community-based forests (CoFMAs)* | | | ✓ | |
| | *An increase of forests increases biodiversity and carbon sink* | | | | |
| 3 | Repurposively "Bluing" subsidies in the fisheries sector | ✓ | 4.1.2.(ii) | ✓ | 1 (b, c & e); 2 (b) |
| 4 | Establish and operationalize public-private partnership (PPP) framework for "Re-greening Zanzibar Program" (coastal and inland areas) | | | ✓ | 1 (b, c & e); 2 (b); 3 (a & b) |
| 5 | Repurposing subsidies for sustainable seaweed farming | ✓ | 4.1.6 (i & ii) | ✓ | 1 (b, c, d & e); 2 (b); 3 (b) |
| 6 | Secure Debt-for-nature swaps for sustainable BLUE economy (coral reefs restoration) | ✓ | 4.1.6 (ii) | | |
| 7 | Establish Blue Fund for BLUE Economy implementation | ✓ | 4.1.1 (i & iii); 4.1.2 (I & ii); 4.1.4 (I – iv); and 4.1.5 (i– v); 4.9. (I – iii) | ✓ | 1 (b, c & e); and 2 (b) |
| 8 | Establish crowdfunding for restoration of degraded coastal and beach areas | ✓ | 4.1.1 (I & ii); 4.3.1 (vi & vii); 4.5.2. (iii & iv); 4.8 (I -iv) | ✓ | 1 (b, c & e); and 2 (b) |
| 9 | Identify and develop a new program for scaling up of REDD+ initiatives | ✓ | 4.1.1 (I -ii); 4.1.6 (I – ii) (for mangroves) | ✓ | 1 (b, c , d & e); and 2 (b) |
| 10 | Introduce subsidies for clean energy sources (gas and electricity) for household energy | ✓ | 4.3.1 (vii-viii) | ✓ | 1 (c, d & e); and 2 (b) |
| 11 | Increase Corporate social responsibility (CSR) contributions from the private- sector for biodiversity conservation | ✓ | 4.1.1 (i) and (iii); 4.1.2 (i) and (ii) | ✓ | 2(a) |
| 12 | Reform tourist's entrance fee structure for protected areas and adopt a Digital Voucher System for the fees collection | ✓ | 4.5.2 (iii) & (iv); 4.6 (i) –(iv); 4.7 (iv) &(v); 4.8 (i) – (iv); 4.9 (iii) & (iv) | | |
| 13 | Review and strengthen the revenue retention framework/Scheme for the PAs (MCAs & Terrestrial) | ✓ | 4.1.1 (i) and (iii); 4.1.4 (i) –(v); 4.4.4 (i) –(v); 4.5.2 (iii) & (iv); 4.6 (i) –(iv); 4.8 (i) – (iv); 4.9 (i) - (iii) | | |

*The information presented below (Box 4) provides examples of different biodiversity-related sectoral strategies, considering the Blue economy and climate change fund thematic areas, linked to prioritized FSs.

**BOX 4: Blue Economy implementation strategies and Climate Change Fund Thematic Areas linked with the 13 prioritized FSs in Table 12 above**

**A: BLUE Economy Implementation Strategies that are linked with BIOFIN FSs**

**4.1.1 Enhancing Sustainable Fisheries**

**Main issue:** Unsustainable fishing

***Implementation Strategies linked with BIOFIN FSs***

i. Facilitate an integrated approach to coastal zone management and marine spatial planning aimed at maintaining and enhancing the functional integrity of the coastal and marine resource systems while enabling sustainable economic development through rational, inclusive decision-making and planning; and
ii. Design and implement awareness, education, and training programs focused on sustainable fishing, conservation practices, value-addition, climate change, and its viability as well as improving coastal livelihoods;

**4.1.2. Transforming investments and capacity in Deep-Sea Fishing.**

**Main issues:**

i. Inadequately exploited deep-sea fishing potential in Tanzania's Exclusive Economic Zone (EEZ); and
ii. Lack of resources and capacity to enable local communities to move out of the near-shore fishing grounds and into the deep-sea domain for industrial-scale fisheries.

***Implementation Strategies linked with BIOFIN FSs***

i. Design and implement awareness, education, and training programs for the local communities focused on industrial fishing in the EEZ areas;
ii. Strengthen, organize, transform and modernize the local fishing industry beyond the current artisanal and nearshore Zanzibar fishing grounds and into EEZ areas;

**4.1.4. Fisheries and Aquaculture Resources Management:**

**Main issue:** Insufficient capacity to manage marine conservation areas (MCAs), their constituent critical habitats and other fishing grounds (Weak enforcement mechanisms, technical capacity in mobilizing scientific research)

***Implementation Strategies linked with BIOFIN FSs***

i. Promote management of Marine Conservation Area (MCA) systems and enhance capacity in skilled human resources;
ii. Strengthen fisheries and aquaculture regulatory regimes towards sustainable fisheries and aquaculture;
iii. Promote Priority measures of Strong Enforcement (PSE) approach for effective Monitoring Control and Surveillance of fisheries in the territorial waters while creating incentives and opportunities for local communities; and
iv. Strengthen the management of fisheries and aquaculture in the territorial waters by making better use of traditional fisheries and aquaculture management practices

**4.1.5. Fisheries and Aquaculture Inputs and Equipment**

**Main issue:** Lack of access to modern fishing and aquaculture equipment and technological inputs.

***Implementation Strategies linked with BIOFIN FSs***

i. Strengthen the capacity of aquaculture hatchery to improve fish seeds availability;
ii. Promote "Blue Bio Trade" principles on trade and investment in marine biological resources in line with social, economic, and environmental sustainability
iii. Promote credit support, sustainable loans, and financial investment for the communities involved in fisheries and aquaculture subsectors;
iv. Promote the investment of fish feeds manufacturing industries and facilities;
v. Promote inclusive safety and security management systems in the local administrative units.

**4.1.6. Ecosystem Changes due to Climate Change**

**Main issues:** i) A sharp decline in seaweed produce; ii) Coral bleaching affecting small and artisanal fisheries

***Implementation Strategies linked with BIOFIN FSs***

i. Support to enable seaweed farmers and artisanal fishermen to harvest and fish in deeper waters.
ii. Promote climate adaptation measures to conserve critical habitats and marine biodiversity.

**4.3.1 Slow Adoption of Offshore Renewable Energy.**

**Main issue: The** challenges of access to reliable, affordable, and secure energy in supporting the ongoing economic structural transformation under Vision 2050.

***Implementation Strategies linked with BIOFIN FSs***

i. Improve enforcement and compliance mechanism in conserving and protecting coastal forests and critical habitats such as mangroves.
ii. Promote public awareness on linkages between renewable energy and the need to ensure the protection and conservation of coastal and marine ecosystems

**4.4.4. Insufficient National Data Repository and Data Management**
**Main issue:**
Lack of a permanent and secured data storage area.

***Implementation Strategies linked with BIOFIN FSs***
*(Our opinion: Since it is a national thing, if possible, it would be great for each biodiversity-related sector to share the costs and agree on its management structure)*

i. Establish a secured site for the construction of NDR.
ii. Develop a backup plan for data retrieval and storage.
iii. Enhance data safety and security and protection of the NDR system.
iv. Formulate an NDR capacity building in data security and storage.

**4.5.2. Ineffective Environmental Protection of Marine Hotspots**
**Main issue:** ineffective environmental management of coastal and marine ecosystems coupled with poor waste management, mismanagement of freshwater resources, and inadequate protection of endangered flora and fauna

***Implementation Strategies linked with BIOFIN FSs:***

i. Establish and operationalize the 'Zanzibar Ecotourism Plan' in order to maintain its pristine environment and rich traditional values; and
ii. Promote knowledge-based awareness on environment and social management and its resources to inform the development and environmental protection, as well as protection of endangered animals.

**4.6. Blue Economy Governance**
**Main issue:** Lack of an integrated planning framework dedicated toward the overall management of blue economy Components

***Implementation Strategies linked with BIOFIN FSs:***

i. Enhance knowledge, awareness, and capacity in blue economy governance.
ii. Develop a blue economy integrated planning and development system.
iii. Review cross-sectoral policies, legal and institutional frameworks.
iv. Establish an ocean governance strategy in compliance with relevant international agreements

**4.7. Maritime Safety, Security and Environment**
**Main issue:** Hampered effective management of the Zanzibar maritime domain

**Implementation Strategies linked with BIOFIN FSs:**

i. Integrate the general public, such as fishers and local coastal villagers, in policing Zanzibar's maritime waters; and
ii. Strengthen preparedness response and recovery measures to natural hazards, human-induced risk, and maritime accidents, including implementing the oil spill contingency plan

**4.8 Marine Spatial Planning:**
**Main Issue:** Coastal and marine ecosystems are threatened by human activities

***Implementation Strategies linked with BIOFIN FSs:***

i. Conduct awareness and knowledge, technical capacities, and expertise on MSP and its role in the conservation and management of the coastal and marine environments.
ii. Harmonize cross-sectoral legal and institutional frameworks to ensure the success of the MSP process.
iii. Carry out a comprehensive MSP consultation process, zoning and mapping, data tools, and research studies.
iv. Implement, ensure compliance with, and enforce the marine spatial management plan;

**4.9. Sustainable Blue Economy Financing (Blue Fund)**
**Main Issue:** Inadequate finance resources for Blue Economy in Zanzibar

***Implementation Strategies linked with BIOFIN FSs:***

i. Develop innovative financing tools and enablers to implement BE strategies at national, regional and continental levels
ii. Establish a Blue Fund, including a blue carbon finance initiative, to facilitate the financing of BE-related programs and projects
    - *This has been earmarked, in BIOFIN's BFP as a FS (BLUE Economy Fund) for implementation in Zanzibar*
iii. Initiate fiscal reform and other incentives to improve financial systems
    - *This is also crucial to BIOFIN FSs implementation*

**B: Thematic focus for the CCF**

The ZCCF consists of four thematic areas, which are categorized based on the priorities of the RGoZ in relation to climate change objectives as reflected in Zanzibar climate change policies, strategies, and plans. The ZCCF will focus on the following thematic areas:

1. **Institutional capacity development at all levels e.g:**
    a) Climate change financing
    b) Project management

c) Gender and youth mainstreaming
d) Knowledge management
e) Monitoring, Evaluation, and Reporting

2. **Mainstreaming of climate change at all levels e.g:**
   a) Climate change integration into sectors, CSOs, private sector, etc.
   b) Contribution to the implementation of the national priorities on adaptation and mitigation.
   c) Climate change mainstreaming into country's development visions and budgetary and planning processes of the government.
   d) Climate change mainstreaming into policies, strategies, plans, programs, and projects.
3. **Climate change interventions at the grassroots levels e.g:**
   a) Adaptation and mitigation programmes and projects
   b) Community awareness interventions.
4. **Research and development on climate change**

**Step 4: Description of prioritized FSs**

All the prioritized FSs were described in detail according to the BIOFIN Workbook of 2018, presented in the next section 4.

### 3.4 Plan's targets regarding resource mobilization based on the BER and FNA

The BFP has 13 prioritized Finance Solutions that would be implemented to fulfil key finance-related targets for expected financial results areas focusing on whether the FS; generates additional revenue, avoids future biodiversity expenditure, ensures better spending of the financial resources, and/or realigns current biodiversity expenditures. The FSs would be unlocking funds for biodiversity conservation. All these categories of expected financial results areas, if well-achieved, would significantly reduce the determined finance gap.

# 4 FINANCE SOLUTIONS

This chapter provides a detailed description of the final list of 13 prioritized FSs based on the key aspects stipulated in the BIOFIN WorkBook of 2018:

i) Context for the finance solution

ii) Objectives of the finance solution

iii) Expected financial results and investment case

iv) Next steps and key actors including milestones and resources needed for implementations.

The prioritized FSs are described below following the sector-wise arrangement. In the descriptions, the level at which each solution was prioritized from the scoring process is not considered in this section. It was assumed that the sequential arrangements based on the prioritization series already provided in Chapter 3 above, may not necessarily dictate the implementation serial arrangements and timeline due to lack of uniformity of a solution-specific resources availability and implementation environment.

## B. Ministry of Blue Economy and Fisheries (MoBE&F)

The prioritized finance solutions under the Ministry of Blue Economy and Fisheries are listed below, followed by their descriptions underneath:

i) *Establish Blue Fund for Blue Economy implementation*

ii) *Repurposing subsidies in the fisheries sub-sector: fishing gears, storage and processing facilities for local market and export*

iii) *Repurposing subsidies for seaweed farming*

iv) *Securing Debt-for-nature swaps for BLUE economy implementation and coral reefs restoration*

v) *Reform entrance fee structure for protected areas and adopt a "Digital Voucher System" for the fees collection*

vi) *Review and strengthen the retention framework/ Scheme of the fees in the PAs (MCAs).*

### 4.1 Establishing and implementing Blue Fund for Blue Economy

***Overview***

The Blue Economy, like other sectors in Zanzibar faces a significant inadequate finance resources for biodiversity conservation in the coastal and marine ecosystems. This formed the basis for the Blue Fund finance solution, mentioned in the BLUE economy implementation strategies, of particular strategy No. 4 (Sustainable Blue Economy Financing). It aims to enable the RGoZ to mobilize the required finance resources and provide stable, reliable, long-term funding sources for biodiversity conservation. Its implementations are well-anchored on the Blue Economy Policy of 2020, the Blue economy implementation strategies, operational and funding modalities to be developed parallel with mobilization strategies, multilateral institutions, agreements with partners, guidelines and frameworks (e.g. M & E) to be developed. The process will undergo key steps; feasibility study, an implementation proposal, operationalization, monitoring and evaluations. The Fund is expected to generate additional finance resources, encourage better spending and possible realignment of biodiversity expenditures, realizing significant positive impact on biodiversity.

i) **Context of the finance solution**

The Blue Fund (BF) to be established in Zanzibar under the MoBE&F offers tremendous opportunities and helps address pressing challenges by contributing to blue economic growth, improve livelihood, and the health of marine and coastal ecosystems. The solution is well-linked with BLUE economy implementation strategies. For instance, strategy No. 4 (Sustainable Blue Economy Financing (Blue Fund)) is largely focusing on addressing one main issue, "Inadequate finance resources for the Blue Economy in Zanzibar". Implementation strategies related to the strategy No.4 are listed below;

- Developing innovative financing tools and enablers to implement BE strategies at national, regional and continental levels,
- Establishing a **Blue Fund,** including **a blue carbon finance initiative**, to facilitate the financing of Blue Economy related programs and projects. This has been earmarked in the BIOFIN process as one of the prioritized FSs,

The BE Policy (2020) provides the MoBE&F a responsibility of developing the Blue Fund as a blue finance solution to ensure environmental sustainability of oceans against pollution and environmental degradation, including activities to support sustainable fisheries and tourism. The solution will mobilize financial resources to support and strengthen ongoing biodiversity-friendly

income generating projects such as sustainable artisanal fisheries, deep-sea fishing, value-added seafood production projects, certified green turtle farming, etc. The exact structure will be defined after the feasibility study.

Potential sources of funding could include the RGoZ, ODA, private sector donations, royalties, fees and fines being paid to the RGoZ from deep-sea fisheries, Oil & Gas, and other ocean-based businesses. The establishment of the Blue Fund will enable the RGoZ to mobilize required resources and provide stable, reliable, long-term funding sources for the protection and sustainable management of marine resources. For the BIOFIN context, the BF would develop funds disbursement modalities, partly based on predetermined conservation-related activities focusing on different potential partners. Different potential partners and funders have different biodiversity-related priorities to support. This concept would be integrated in the disbursement modalities and other arrangements.

The following components will be developed for the establishment and operationalization of the Blue Fund:

- Operational and funding modalities;
- A resource mobilization strategy;
- An investment strategy mechanism;
- Partnerships agreements with stakeholders;
- Disbursement modalities; and
- Monitoring, reporting, and evaluation mechanism.

If the finance solution will include the revolving mechanism of disbursing the financial support to biodiversity conservation projects, the Blue Fund framework will be needed to set important eligibility criteria for BE-related projects to access the funds so as to ensure further transactions for contributing to the conservation of marine resources and the ecosystems (ocean and coastal). Examples of such criteria that have been used elsewhere in the world on similar funds, are yet valid in the Zanzibarian context includes the following:

- Biodiversity conservation significance: The potential contributions/impact of the applicant project to biodiversity conservation, the ecosystem (in the marine and coastal ecosystems) and livelihoods,
- Potential scaling up to other locations and/or influencing other groups/similar projects/ investments with high conservation impact and possible impact on institutionalization,
- Broad potential for sustainable development in that, the project goes beyond biodiversity conservation benefits. The fund will also be promoting those projects that would also enhance environmental conservation, socio-economic and gender-focused co-benefits,
- Legal recognition and capacity of the projects team to implement the intended project activities to be funded by the Blue fund, and its alignment with the BE policy, Zanzibar Vision 2050, Mkuza III,
- Economic efficiency of the project benefiting from the fund. This is a cost-benefit ratio of the project applying for the fund, measured in impact per TZS equivalent to US dollar,
- Project financial viability to provide a picture of its financial soundness, indicating the high chance of returning the funds (if given as a loan or revolving) for further transactions on similar conservation-related objectives, and
- Other criteria to be approved by the lead institution/agency and MoBE&F

ii) **Objectives of the finance solution**

The main objective of the Blue Fund is to support the RGoZ in filling the financial gaps in ensuring sustainable implementation of the Blue Economy in Zanzibar by mobilizing additional financial resources. The solution aims, among others, to:

- support strategic areas/components that are ecologically important for an integration of marine-dependent local community livelihoods, mainly artisanal fishing. It will support coral reefs' restorations, protection an relevant studies to provide.
- Development of environmentally friendly small-scale artisanal fishing landings, storage and boat maintenance sites in master planned zones. The landing sites will help the small-scale fishermen to safely and sustainably carry out their fish stock offloading operations, properly park/moor their boats and do their maintenance activities without damage to the coral reefs, seagrass, water quality, or seaweeds and other mariculture pens;
- Development of fish landing markets and integrated fish processing facilities adjacent to master planned zones for quality products/

auctioning/cold storage units/ice making units and the services that would reduce post-harvest losses and improve the quality of the blue bio-trade products;

- To reduce pressure from artisanal fisheries on marine coastal resources through supporting them with acceptable and sustainable long-distance fishing gears;
- support the strengthening of the framework for healthy marine and coastal ecosystems,
- Fighting deforestation of mangroves and promoting the use of nature-based solutions such as replanting mangroves to boost resilience of the coastal ecosystem;
- support the Seascape Zoning Scheme (SZS) under the Marine Spatial Planning Framework (MSPF) to guide sustainable use of marine resources in different zones;
- Strengthening the capacity for valuation and conservation of the blue natural capital;
- enhancement of livelihoods of people depending on marine resources, and
- climate resilience and empowerment of women involved in the blue economy-related sub-sectors such as seaweed and fisheries.

iii) **Expected financial results**

The Blue Fund will generate additional revenue for Blue economy implementation and promote better spending of the financial resources and realignment of current biodiversity expenditures for marine biodiversity conservation.

**Next steps, key actors and milestones**

The Blue Fund will be developed based on experience from related processes in Tanzania that is focusing on forestry and other natural resources. Experience and good practices from other countries such as Rwanda will be useful too. The process will undergo various key steps (Table 13):

***a) Feasibility study***

A detailed feasibility study for the establishment and operationalization of the Blue fund will focus at least on the following key aspects:

- Analyses of relevant policy, legal, fiscal, and institutional framework existing for the BF establishment operationalization,
- Development of design options for the BF structure, and
- Development of fund mobilization strategies as well as investments options
- Fund management guidelines including funds disbursements and follow up principles;
- Operationalization model including management structure and standard operating procedures.

***b) Post-feasibility steps***

The legal and organizational structure, an investment and resources mobilization strategy, a detailed 2-year road map, disbursement modalities, and associated budget will be developed. The following will be considered:

- Design and approval of the structure of BF,
- Development or reviews and adoption of legislation and all by-laws as required,
- Development of resource mobilization, investment, and disbursement strategies of the BF;
- Support a resource mobilization campaign among national and international donors to attract capital for the initial endowment
- Development of a detailed step-by-step scenario for the BF development for 2 years (road map).

The MoBE&F and MoF&P will collaboratively lead and manage its implementation.

**Table 13: Proposed action plan and estimate budget for establishment and implementation of the Blue Fund**

***Target 18: By 2026, financial resources in support of biodiversity programmes significantly increased***

| Activities | Output | Timeframe | | | | | Budget(x000) | | | | | Funding source | Responsible actor/s |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2022 | 2023 | 2024 | 2025 | 2026 | 2022 | 2023 | 2024 | 2025 | 2026 | | |
| ***Preparation Stage*** | | | | | | | | | | | | | |
| Feasibility study: Carry out a detailed feasibility study on establishment of Blue Economy Fund involving stake-holder consultations and engagement framework | Proposal | X | | | | | 61,300 | | | | | RGoZ & Donors | MoBE&F, BIOFIN Team, Consultants, TC, SC, MoF&P UNDP & Int'l Technical Advisor |
| ***Implementation:*** | | | | | | | | | | | | | |
| Develop a Full FS implementation proposal (ProDoc) - Design and approval of:<br>• the organizational structure;<br>• an investment, resources mobilization and disbursement strategy,<br>• a 2-year road map and budget for BEF | A Blue Fund framework document | X | | | | | 66,000 | | | | | RGoZ & Donors | |
| Development and adopt relevant legislation | Reports | X | | | | | 61,300 | | | | | RGoZ & Donors | MoBE&F, BIOFIN Team, Consultants, TC, SC, MoF&P UNDP & Int'l Technical Advisor |
| Support a resource mobilization campaign among national and international donors to attract capital for the initial endowment | Campaign reports & funds secured | X | | | | | 34,400 | 30,000 | | | | RGoZ & Donors | |
| Support the operationalization of the BEF | Mid-Term Evaluation Reports | | | X | X | | | | 35,000 | 25,000 | | RGoZ & Donors | |
| Terminal Evaluation | Terminal Evaluation Report | | | | | X | | | | | 66,000 | RGoZ & Donors | |
| TOTAL | | | | | | | **223,000** | **30,000** | **35,000** | **25,000** | **66,000** | | |

## 4.2 Repurposing subsidies in the fisheries sub-sector

### *Overview*

Over 90 percent of the fisheries production in Zanzibar is artisanal, conducted in the shallow waters, using traditional fishing gears and facilities that are threatening marine biodiversity. To reduce such an increasing pressure in these areas, well re-designed subsidies are needed to ensure sustainable fisheries in both shallow waters and high sea zones based on sustainable fish quota set and regularly determined fish stocks. The FS aims to review the framework related to subsidies in the fisheries industry and re-design those potentially harmful to biodiversity to ensure sustainability, considering fisheries-related gears, facilities and services. Existing legislative and regulatory instruments that guide deep sea fishing, and the international collaborations in prohibiting certain forms of fisheries subsidies provide conducive environment for its implementations. The main steps include; a detailed assessment of subsidies, review of subsidies arrangements-frameworks, implementation proposal for of selected subsidies including re-designing, implementations, M&E Framework for fish stock and quota. The FS will avoid future biodiversity expenditure due to over-fishing and enhancing additional finance resources for attaining sustainable fisheries development.

i) ***Context of the finance solution***

The fisheries sub-sector in Zanzibar is one of the key sub-sectors that generate revenue to the government and provide employment to many people along the chain including those involved in small-scale fishing and mariculture activities such as sea cucumber farming, crab fattening farming, octopus closure, fish ponds, etc. Currently, over 90 percent of the fisheries production in Zanzibar is artisanally conducted in the shallow waters, using traditional fishing gears. The increasing number of artisanal fishers at the few yet depleted fishing grounds within the territorial waters threatens the marine biodiversity and the ecosystem health. Yet, the traditional fishing vessels have low capacity to sail to deep-sea where there is potential high catch-per-fishing effort and could reduce pressure in the shallow waters. This is why, well-framed subsidies and incentives are needed along with adherence to sustainable fishing quota and/or fish stock available. The subsidies would ensure all the fisheries-related gears, facilities, and services along the whole chain from the fishing areas to export zones are sustainable. This would be possible through an assessment of potentially harmful subsidies, and lobbying for re-designing. The assessment of the fisheries chain (artisanal and deep-sea fisheries) will inform the type and level of subsidies that do not revert the “fishing wheel” to “overfishing”.

In this context, the finance solution will lead the department to undertake fish stock evaluations in both shallow waters and high sea to establish well-informed fish quota settings, type and capacity of the fishing gears to be subsidized, off-tankers, storage, and fish products processing facilities to be subsidized. The evaluation will inform whether some fish species are overfished, depleted, or are at their limit. This will ensure that the proposed subsidies won’t wreak havoc on Zanzibar’s marine ecosystem, nor disrupt any crucial element of food chains in the marine ecosystem. Below are some of potential subsidies/incentives that need to be considered to ensure they don’t impose a significant negative impact on biodiversity and the ecosystems (Table 14).

**Table 14: Subsidies and Incentives identified under the main biodiversity management sectors**

| Sector | Identified Subsidies/Incentives | Direct and Potential biodiversity impacts |
|---|---|---|
| Fisheries | **Subsidies on fishing equipment:**<br>• Boats that are bigger than 12 meters, are given incentives to encourage fishing in high waters.<br>• Supply of facilities such as cold boxes and ice blocks to help small scale fishermen | • Increased access to fishing sites and fragile corals that are also used as breeding sites<br>• Overfishing resulting from extended fishing time |
| | **Subsidies to promote the export of specific fish products:**<br>• Encouragement of export of high-value marine products such as crabs, shellfish, etc | • Decline of marine biodiversity from increased fishing of the high-value marine species thus reduction of such species |
| | **Subsidies for promoting fish farming:**<br>• Provision for big investments in fish farming in the sea as well as cage fish farming in shallow waters<br>• Establishment of pens for fish seedlings<br>• Established centre supported by the government to support fish farming | • Reduced fishing in the shallow water and coral reef<br>• Availability of alternative fish sources to reduce overfishing |
| | • Potential subsidies to be earmarked for promoting investments in the Zanzibar Blue Economy priorities | • They have to enhance sustainable management of the fisheries and marine resources and biodiversity |
| Tourism | Subsidies and incentives to promote investments in hotels and resorts along the beach and in protected areas:<br>• Provision of 99 years land lease for investors<br>• Tax holidays for large tourist investments<br>• Tax exemption on importation of equipment related to investments and operations in tourism<br>• Provision for projects start-up before Environmental impact assessments (EIAs) are done to avoid delays in investments takeover | • Destruction of biodiversity from large infrastructure development – housing and related utilities such as roads and power along the coasts including pristine areas that hold fragile ecosystems and biodiversity<br>• Clearance of mangroves and other coastal forests<br>• Limited integration of biodiversity mitigation plans in the respective investments |

The finance solution is in line with the government's recent embarkment on the Blue Economy which also addresses the fisheries sector. Currently, there are more than 24,000 artisanal fishers using 5.200 fishing crafts from 254 fish landing sites where the fish is auctioned right at the landing sites. Their attempt to meet the market demand for fishes and other seafoods, tempts them of unrecommended fishing practices, and hence threats to biodiversity and their marine habitats. The traditional fishing boats and gears used include canoes, canoes with outriggers, and sailing boats, with few planked outboard-engine boats. Other gears include purse seines, gill nets, drift nets, scoop nets, hand lines, traps, and weirs. With these facts, the current fishing gears, storage facilities and fish products processing facilities for export are moderately effective to generate adequate revenues in a sustainable way for the government and artisanal fishing communities. To rectify this, the proposed FS, if well-implemented would ensure sustainable fisheries.

Under the institutional and policy context for implementing the FS, the Deep-Sea Fishing Authority (DSFA) is responsible for sustainable fisheries and biodiversity management of the Exclusive Economic Zone (EEZ) of the Tanzanian waters. There are two legislative and regulatory instruments that guide deep sea fishing which include the licensing fees namely the Deep-Sea Fishing Authority Act No. 17 of 2007 (Amendment) and Deep-Sea Fishing Authority Regulations of 2009 (Amendment) Regulations, 2016). International collaborations in prohibiting certain forms of fisheries subsidies that contribute to overcapacity and overfishing will also strengthen its implementation. For instance, the recent work by the International Institute for Sustainable Development (IISD) on fisheries, trade, and sustainable development contributes to crafting multilateral and regional trade rules and policies that support sustainable fishing. Regular assessment will be carried out to monitor the various fisheries subsidies (internal and international). In addition,

the existing participation and involvement of local communities in natural resources management (NRM) will further provide conducive environments for implementation of this solution. However, improvement will be needed for the participatory fisheries management structures including local level fisheries management committees (Shehia Fishermen's Committee). Importantly, a M&E framework will be needed around the re-designed subsidies. Generally, an existing solid political will and diplomatic flexibility in the blue economy arena will strengthen the implementation of this solution. Ultimately, there would be improvement of food security, income, livelihoods of the fisheries communities, collection of revenue to the government and potential re-investment of collected taxes to biodiversity conservation.

ii) ***Objectives of the finance solution***

The solution aims to fulfil the following objectives:

- To review the framework related to subsidies in the fisheries sub-sector that will discourage or moderate those subsidies with potential negative impact, meanwhile ensuring unharmful subsidies generate positive results in terms of; sustainable fishing (deep sea and artisanal fishing), efficient and effective storage and fish processing, adequate funds re-invested to the conservation of the marine resources and the ecosystem, establishing aquaculture processing units such as anchovy drying and processing units, and sea cucumber processing units, and reduced loss of fished revenues/income.
- The RGoZ to consider re-designing fisheries-related subsidies on sustainable fishing gears, storage and onshore processing facilities, to promote sustainable artisanal and deep-sea fisheries. Subsidies to be considered include tax incentives, price support to acceptably sustainable fishing gears, and reduction or exemption of import duties and sustainable fishing quotas to avoid overfishing. Tax incentives are appropriate for the government as they do not require a direct outlay of capital. Native communal fishing groups, would receive direct fiscal subsidies since they would be unlikely to benefit from income tax deductions.
- Add value of fish and their processed products both for domestic market and export through subsidizing and supporting for effective and efficient storage and processing facilities to various fish stakeholders along the chain. The solution also focuses on large cold storage onshore facilities, to be used as well as sorting centres of the fishes before the export. This will add value to the resources for the domestic and international market meanwhile reducing the spoilage and loss of harvested fishes due to poor storage and processing facilities. Women groups involved in the processing fish products for local market would be subsidized on the necessary facilities and supported in terms of capacity and groups governance and add their local values to ensure well-connected nodes of stakeholders along the chain. Generally, this will need a rapid feasibility study for a comprehensive investment sub-framework on such infrastructures and human resources capacity especially the artisanal fishers and women and youth groups involved along the chain. This may be part of the above-mentioned framework to be reviewed for the fisheries sector that will accommodate all these activities along the fisheries value chain.

iii) ***Expected financial results***

The finance solution would generate additional revenue to the sector. It will avoid future biodiversity expenditure due to over-fishing and distractive fishing gears. It will also encourage realignment of current public and private biodiversity expenditures leading to fisheries-focused budgets.

iv) ***Next steps, key actors and milestones***

The key steps and milestones for the establishment and implementation of the FS are presented in table 15 below. The Department of Fisheries and Mariculture, MoBE&F and MoF&P will collaboratively lead and manage its implementation.

**Table 15: Proposed timeline for FS implementation on "Bluing" subsidies in the fisheries sub-sector**

| ACTION PLAN AND BUDGET | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Target 3: By 2026, incentives harmful to biodiversity are eliminated, phased out/reformed and positive incentives for conservation and sustainable use are developed and applied | | | | | | | | | | | |
| Activities | Output | Timeframe | | | | Budget(x000) | | | | Funding source | Responsible actor/s |
| | | 2022 | 2023 | 2024 | 2025 | 2022 | 2023 | 2024 | 2025 | | |
| Preparation Stage: | | | | | | | | | | | |
| Undertake a detailed assessment of subsidies **focused** on **fisheries value chain and c**apacity needs assessment as an input to the framework review process; involving stakeholder consultations and validation workshops, etc. | Feasibility study Proposal | X | | | | **66,700** | | | | RGoZ & Donors | MoBE&F, BIOFIN Team, Consultants, TC, SC, MoF&P UNDP & Int'l Technical Advisor |
| ***Implementation:*** | | | | | | | | | | | |
| Support review of subsidies arrangements - frameworks for Deep Sea and Artisanal fisheries, and onshore cold storages and processing facilities | A framework fisheries value chain | X | | | | 56,260 | | | | | |
| Develop Proposals for implementation of unharmful subsidies for potential funding sources (RGoZ, investors in MCAs; fishing companies; | Proposals developed and secured support | X | | | | | **54,425** | | | RGoZ & Donors | DoF, MoBE&F, MoF&P, exporters/investors, DoF, DoT, and the public |
| Lobby and fundraise from international finance agencies and Donors | | | X | | | | 41,760 | | | | DoF, MoBE&F |
| Support implementation of revised subsidies arrangements | Implemented Subsidies | | X | X | X | | 150,000 | 150,000 | 150,000 | | |
| A comprehensive M&E Framework for the FS, fish stock and quota utilization | M&E Framework | X | | | | 95,440 | 95,440 | 95,440 | 95,440 | | |
| TOTAL | | | | | | **218,400** | **341,625** | **245,440** | **245,440** | | |

## 4.3 Repurposing subsidies for sustainable seaweed farming

***Overview***

Seaweed farming is one of the main incomes generating activities (IGAs) being promoted in Zanzibar that t has many potential positive impacts on biodiversity conservation and the coastal community's livelihoods. Unharmful subsidies are needed to support sustainable practices by addressing the various challenges responsible for the observed decline trend of its performance in Zanzibar. The thus aims to review for improving subsidies from the government and other stakeholders in supporting revival of safe seaweed farming practices. In addition to the conducive policy and institutional environment that would favor an implementation of the FS, the "President Dr Hussein Mwinyi has recently expressed his government commitment to strengthening seaweed farming especially by boosting production and value addition of the commercial crop" (https://allafrica.com/stories/202211050117.html; accessed on 25th Nov 2022). The key steps would start with evaluation of the current seaweeds value-chain including an assessment of the potential unharmful subsidies followed by an implementation proposal, reviewing the farming framework and re-designing the subsidies, operationalize and M&E framework. The solution is expected to enhance avoidance of future biodiversity expenditure due to poor seaweed farming practices and it will generate additional revenue where portions of the collected fees would be re-channelled to biodiversity conservation.

i) **Context of the finance solution**

Seaweed farming is a socioeconomic activity dominating in aquaculture in Zanzibar. It is an important industry that supports the livelihoods and employment of coastal community, women in particular. In 2020, seaweed was among the Zanzibar's largest cash crops, exporting 8,784.6 tons at a value of TZS 5,387.1 million. It represents approximately 17.8% of Zanzibar's total exports value and 23.4% of total cash crop export value. About 80% of the seaweed farmers are women and 90% of seaweed is cultivated in Pemba Island. Nonetheless, the seaweed production in Zanzibar has decreased by 47% from 16,724 tons in 2015 to 8,784.6 in 2020. This is partly caused by unreliable market for seaweed and their processed products, and disease due to climate change effects. Yet, many seaweeds farming groups, especial women groups in Zanzibaris do not have adequate financial capability to deal with the prevailing challenges/ problems in order to improve the production, and hence income. Re-designing for Unharmful subsidies (via governments, NGOs or other social factors) are thus needed to sustain the activity while ensuring biodiversity sustainability.

The main challenges that face the seaweed sub-sector in Zanzibar are listed below:

- poor quality and limited availability of varieties with higher market potentials,
- limited investment on secondary and tertiary processing of seaweed,
- inadequate farmers' skills in farming and post-harvest handling techniques such as drying, inadequate seaweed inputs and low price,
- an increasing incidence of diseases and over utilization of the intertidal zones. Although the deeper seawater seaweed farming is considered as one possible option to cope and adapt to warming stressors in the intertidal zones, some limitations exist such as limited capacity and access to vessels for safe practice in the relatively deep areas,
- little knowledge about current prices or market conditions fluctuation.

The review for improving positive subsidies from the government and other stakeholders (e.g., subsidized inputs, extension services and tax incentives) would reduce costs involved for inputs and export, leading to socio-economic gains to women groups involved, and get motivated for sustainable farming. Improvement and provision of reliable positive subsidies is likely to enhance a safe working condition to women, and hence sustainability both socio-economically and environmentally. The revitalization of seaweed farming and its contribution to the livelihood of people in Zanzibar would therefore be effectively sustained through addressing the main challenges. These would require many efforts including unharmful subsidies.

Appropriate subsidies on seeds, boats, seaweed cultivation gears, drying and processing facilities will enable women seaweed farmers to improve the farming even in the deeper parts of the subtidal basins of the surrounding lagoons. This will offset the impact of climate change associated with sea surface temperature, sea level rise and declining rate of the existing seaweed stock in Zanzibar. A reviewed framework, focusing to biodiversity conservation and coastal community livelihoods, is needed for improving the type, extent, and management of

selected positive subsidies from the government and other stakeholders. The framework review may need inputs from an evaluation of the current value chain of the different seaweeds from the production stage through the processing and distributions to local and global markets. The value-chain evaluation and framework review will ascertain the key areas worth for unharmful subsidies and investment: primary, secondary and tertiary processing of seaweed, and improving post-harvest handling techniques such as drying, packaging and storage.

The seaweed farming industry, if well-subsidised, has many positive impacts to biodiversity conservation in Zanzibar including the following:

- Enhances coastal and marine resources management based on sustainable utilization of natural resources and control of land-based sources of pollution in coastal/ marine areas,
- Contributes to protection of marine protected areas (MPAS) and ecosystems as the farming is always practiced in determined areas considering the MPA's boundaries,
- Protection of critical habitats such as mangroves, seagrass and coral reefs,
- Plays a significant role in an integrated coastal zone management planning and zoning to control the unregulated exploitation of the intertidal areas, and
- carbon sequestration

ii) **Objectives of the finance solution**

The solution aims to develop biodiversity positive subsidies to support revival of seaweed farming in Zanzibar to generate sustainable revenues, enhance livelihoods of the coastal communities, largely the women, and significant contributions to biodiversity conservation in the areas and costal ecosystem.

iii) **Expected financial results**

The solution will generate additional revenue where portions of the collected fee on the sold seaweeds and their products would be re-channelled to biodiversity conservation. It will also avoid future biodiversity expenditure due to poor seaweed farming practices.

iv) **Next steps, key actors and milestones**

The following are the key steps for the finance solution implementation, including the lead agent, key stakeholders, and proposed timeline. The MoBE&F and MoF&P will collaboratively lead and manage its implementation (Table 16).

Table 16: Proposed timeline for implementation of FS on subsidizing seaweed farming

ACTION PLAN AND BUDGET

| Target 3: By 2026, incentives harmful to biodiversity are eliminated, phased out or reformed and positive incentives for conservation and sustainable use of biodiversity are developed and applied | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Activities | Output | Timeframe | | | | Budget(x000) | | | | Funding source | Responsible actor/s |
| | | 2022 | 2023 | 2024 | 2025 | 2022 | 2023 | 2024 | 2025 | | |
| *Preparation Stage:* | | | | | | | | | | | |
| Support a detailed evaluation of the current seaweeds value-chain including a feasibility of potential unharmful subsidies | A seaweeds feasibility of potential unharmful subsidies Report | X | | | | 56,700 | | | | RGoZ & Donors | DoF, MoBE&F, BIOFIN Team, Consultants, TC, SC, MoF&P UNDP & Int'l Technical Advisor |
| Prepare a FS implementation proposal fitting to potential sources of support: RGoZ, national and international finance agencies and Donors | FS implementation proposal | | X | | | | 44,425 | | | RGoZ & Donors | DoF, MoBE&F, BIOFIN Team, Consultants, TC, SC, MoF&P UNDP & Int'l Technical Advisor |
| *Implementation:* | | | | | | | | | | | |
| Support review of the seaweed farming framework, embracing all stages: primary, secondary, tertiary, post-harvest processing and markets | Report | X | | | | 51,300 | | | | RGoZ & Donors | DoF, MoBE&F, UNDP, DoE, coastal communities |
| Support operationalization of two selected unharmful subsidies and promoting investment along the value-chain, considering the key stages (primary, secondary and tertiary processing of seaweed, and post-harvest handling stages (drying, packaging and storage)) to domestic and global markets | | | X | X | X | | 120,000 | 120,000 | 120,000 | RGoZ & Donors | DoF, MoBE&F, BIOFIN Team, Consultants, TC, SC, MoF&P UNDP & Int'l Technical Advisor.<br><br>DoE, coastal communities, coastal women groups |
| Develop and operationalize M&E framework | Evaluation Reports | X | X | X | X | 45,440 | 45,440 | 45,440 | 45,440 | RGoZ & Donors | |
| **TOTAL** | | | | | | **153,440** | **209,865** | **165,440** | **165,440** | | |

## 4.4 Secure Debt-for-nature swaps for BLUE economy implementation

***Overview***

Debt-for-nature swap is one of the acceptable methods to generate funding for biodiversity conservation including coral reef restoration and protection of marine and coastal ecosystems. In Zanzibar, coral reefs are rapidly declining due to several threats, such as over-exploitation of coastal resources, poor land use practices resulting in sediment and nutrient run-off, tourism related activities, coral bleaching and pollution from land and maritime transport, in turn poses a significant threats to biodiversity, local livelihoods, food security, tourism and fisheries. The Debt-for-nature swamp aim to secure finance resources that would contribute address biodiversity conservation issues in the Blue Economy sector, of particular coral reef restoration, restricting further disturbances in other zones and establishing coral monitoring system. The recent debt swap agreement with the Rusian Federation amounting to USD 15m under the Union umbrella of the United Republic of Tanzania (URT) provides an opportunity for its implementations. The key steps would include; awareness creation, advocacy, feasibility study, negotiation, signature stage, transfer of portion of the funds obtained to the RGoZ followed by monitoring of fund transferred and expected results. The finance solution would provide additional financial resources meanwhile encouraging the realignment of current biodiversity expenditures for the coral reefs' restoration and other marine biodiversity.

i) ***Context of the finance solution***

Zanzibar is experiencing a high rate of coral reefs bleaching and loss due to climate change and anthropogenic disturbances including an expanding coastal development for tourism and settlements, unsustainable fishing practices, and pollution. Coral reefs bleaching affects small and artisanal fisheries results suit in the collapse of the coral reef ecosystems. Many of the Marine Conservation Areas (MCAs) were established based on local-scale conservation and fisheries objectives without considering larger-scale ecological connections. The restoration of some coral reefs between two or more MCAs would add an ecological connectivity value, allowing both spawning and free movements to the MCAs, enriching the areas with high biodiversity in terms of species richness, abundance, density, and diversity.

The recent debt swap agreement with the Rusian Federation amounting to USD 15m has been earmarked for forest conservation, and water resources management including piloting the Payment for Ecosystem Services (PES) to compensate conservation initiatives in catchments. The project is implemented by the Tanzania Forest Services (TFS). The World Wildlife Foundation (WWF) oversees the project. This would be one of the possible debt swaps for Zanzibar through the URT. The United Republic of Tanzania (URT) would apply its sovereign debt to be forgiven or partially forgiven by the debtors. As a Union matter, the portion for Zanzibar would be meant for restoration of coral reefs ecosystems such as around core MCAs and coastal areas. Through debt restructuring agreements, the URT will be able to write off a proportion of its foreign-held debt(s) and the portion of the payments to be set aside for the RGoZ that would be directed to support restorations of coral reefs in the biodiversity-rich marine ecosystem. This would be done through donor agreement (s), involving lobbying and negotiations with respective finance agencies and Donors to reduce or cancel the government debts, in return for the government commitment to protect marine biodiversity, in this focus, coral reefs restorations. Since debt swaps involve multiple parties and are typically negotiated over the span of time, significant technical expertise (legal, financial, political) is required to negotiate for a debt swap. The funds, once secured would be channelled to and disbursed through the MoP&F that ensures all the relevant policy and legal arrangements in place are used.

ii) ***Objectives of the finance solution***

The funds to be obtained from this solution aim to contribute to the following objectives:

- To support ongoing efforts to rehabilitate/ restore degraded coral reefs in Zanzibar. Some efforts are ongoing where bleaching-resistant corals are being grown in nurseries and used to rehabilitate degraded reef sites, currently challenged by financial gaps, and are showing little sign of natural recovery. At this stage, relevant information and data would be needed on the trends and current status of the coral reefs in Zanzibar, ascertaining the most vulnerable, high biodiversity value coral reefs and those areas with different magnitudes of damaged and loss of the coral reefs.
- To finance the scaling up of reef restoration in tandem with other interventions such as increased marine protection and strategized sustainable fisheries management practices to

address coral degradation threats. This would focus on the most vulnerable, high biodiversity value coral reefs across the Zanzibar archipelago;

- To support zoning scheme where key areas with significant coral reefs may be zoned as "No-Use Coral Reefs Zones" restricting further disturbances meanwhile encouraging both the natural and manipulated coral reefs' recovery and restorations. The debt swaps would be forgiven in exchange for Zanzibar to set aside important areas around core MCAs and coastal areas with corals reefs as "No take-off Coral Reefs Zones", and/or strengthen their management to allow the coral reefs' recovery. This would ensure the resilience of the coral reefs against anthropogenic disturbances and natural forces such as climate change effects, allowing more biodiversity recovery as well; and
- To support the strengthening of the coral monitoring system and increasing coral monitoring sites.

iii) ***Expected financial results***

Debt-for-nature swaps have high revenue potential and can result in large financial resources commitments dedicated to biodiversity conservation. Pursuing a "debt-for-nature swap" would provide additional financial resources for the conservation. It would encourage realignment of current biodiversity expenditures for the BLUE economy in Zanzibar, focusing on coral reefs restorations.

iv) ***Key steps, actors and milestones***

The key steps for establishment and implementation of this finance solution will include the following:

- Awareness: The BiOFIN may support organizing orientation meetings to determine levels of interest and political feasibility;
- Advocacy: This will involve the preparation of information materials and presentations for advocacy with interested parties, and pre-assessment of the debt to be swapped and of beneficiary projects;
- Feasibility study: identification of possible debt to swap, review of the foreign debt profile, debtor government policy, creditors' willingness to negotiate, financial design, etc.
- Negotiation: This will need the debtor government and creditors enter into formal negotiations on the basis of a technical proposal. In this case, the concept, design and accountability aspects will form the basis of discussion and agreement for the DNS.
- Signature: This step will need the debtor government and creditors sign for the DNS agreement and all ancillary agreements with third parties;
- Transfer of funds: the MoP&F will ensure the funds secured are transferred to the RGoZ; and
- Monitoring of funds transfers and results: The MoF&P and MoBE&F will collaboratively lead the process to secure and manage the whole process for the debt swamp, disbursement and its utilization to realize the intended results (Table 17).

Table 17: Proposed timeline for implementation of the FS (Debt-for-nature swaps)

| ACTION PLAN AND BUDGET | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Target: By 2026, the multiple anthropogenic pressure on coral reef, and vulnerable ecosystems impacted by many factors are minimized | | | | | | | | | | | | | |
| Activities | Output | Timeframe | | | | | Budget(x000) | | | | | Funding source | Responsible actor/s |
| | | 2022 | 2023 | 2024 | 2025 | 2026 | 2022 | 2023 | 2024 | 2025 | 2026 | | |
| *Preparation Stage:* | | | | | | | | | | | | | |
| Carry out a rapid review study to identify potential debt for nature swaps – source, amount and timeframe, its potential and legal requirements | Report | X | | | | | 21,000 | | | | | Private, Donors & ODAs | MoF&P |
| Carry out an assessment to update the status of coral reefs rehabilitation/ restoration to guide prioritization of areas for support | Coral reefs assessment report | X | | | | | 56,260 | | | | | Private, Donors & ODAs | MoBE&F, DoF |
| Prepare a Policy brief and facilitate lobbying for operationalization of the identified debt for nature swaps through the URT | Debt for nature swaps secured | X | | | | | 21,000 | | | | | | |
| *Implementation:* | | | | | | | | | | | | | |
| Develop proposal(s) for disbursement/ or utilization arrangement of the secured project(s) based on the identified sources and requirements | Proposal(s) for utilization of the secured swaps and its governance arrangement | X | | | | | 61,300 | | | | | Private, Donors & ODAs | MoBE&F, BIOFIN Team, DoF, DoE, UNDP & Int'l Technical Advisor, fishers |
| Support scaling up of the restoration and zoning of "No take zones" and strengthen their management | Coral reef area under effective management (ha) | | X | X | X | X | 62,000 | 124,000 | 124,000 | 124,000 | 124,000 | | |
| Support strengthening and implementation of coral reefs monitoring system | Coral reef monitoring system | | X | X | X | X | | 50,000 | 50,000 | 50,000 | 50,000 | | |
| M&E framework and practice | | | X | X | X | X | | 55,440 | 55,440 | 55,440 | 55,440 | | |
| TOTAL | | | | | | | **221,560** | **229,440** | **229,440** | **229,440** | **229,440** | | |

## 4.5 Reforming tourists entrance fee structure and improve collection system (Digital Voucher System) for MCAs and terrestrial protected areas

***Overview***

Tourists entrance fees for PAs in Zanzibar are much lower compared to the Mainland Tanzania and other countries, yet the fee structure has not been reviewed. Further, the traditional fee collection mechanisms significantly contribute to low revenues leading to inadequacy in re-financing biodiversity conservation. The FS aims to review the current fee structure and fee collection system (Digital Voucher System) in order to enhance sustainable revenue collection with high potential for adequate re-investment to biodiversity conservation. In addition to available financial regulations, the FS is building on preliminary options regarding new entrance fees that have been explored by the MoBE&F. The key steps for its establishment and operationalization include; proposal writing, Willingness-To-Pay (WTP) survey, assessing the current fees' situation, designing and operationalize the web-based platform for the Digital Voucher System, preparing communication materials for a new fee structure, design the web-based platform and an effective M&E framework. FS will generate additional revenue, encourage better delivery and realignment of expenditures.

i) **Context**

In Zanzibar, tourists entrance fees for its PAs are much lower compared to the Mainland Tanzania and other countries. The existing fee structure has not been reviewed and each PA has different entrance fee, different financial needs for conservation, and different revenue-sharing agreements. The proposed FS has a rationale that reviewing the current fee structure along with effective and efficient fee collection system (Digital Voucher System) would increase revenues from tourism and increase financing of biodiversity conservation in the respective PAs. Currently, the RGoZ collects $3/day (in Unguja) and $5/day (in Pemba) as visitor fee through a permit system. Yet, the current fee collection mechanisms and evasions practiced by some untrustful actors along the chain are significantly contributing to the low revenues collected that in turn paralyses the government efforts to finance conservation activities. Zanzibar archipelago is one of the world-class tourist destinations worth setting appropriate fees that potential tourists would appreciate their value for money and enjoyment associated with services rendered.

Sustainable financing of PAs as the main tourists' destinations in Zanzibar will ensure a stable "biodiversity-Tourism mutual enhancement' since a successful tourism is highly dependent on healthy destinations, in this matter the MCAs and terrestrial PAs. Healthy PAs means enriched biophysical tourist attractions and hence, a viable destination for enjoyment that will guarantee more revenues and sustainable benefits.

Although preliminary options regarding the fee structure have been proposed by the government, the development of a feasible finance solutions under the support of BIOFIN aiming to improve the fee structure and respective collection system is crucial. The proposed FS is building on some options that have been explored by the MoBE&F:

**Option 1:** No Change of tourists' entrance fees. It was found that this option would retain the "business as usual" scenario with limited revenues from the tourists' fee based on the current fee structure.

**Option 2:** Reviewing the existing voucher/permit fees one of between $3 and $5 to a higher fee rate of i) $10 voucher, and ii) the use of Visa supplements. This option would increase revenues to some extent as indicated below (Figure 2).

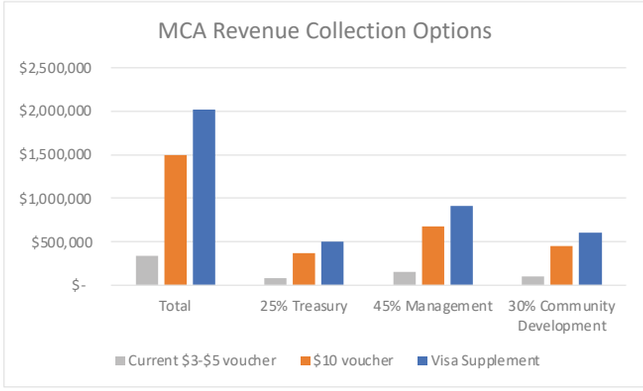


Figure 2: Revenue collection scenario under option 2.
*Source*: Dr. Makame O. Makame, 2022

**Option 3:** To utilize indirect mechanisms such as a $10 Airport Tax Flight supplement. This option would be used in combination with visitor fees to exclusive/closed areas e.g. small island initiatives and would require a synchronized fee charging and sharing mechanism to avoid bureaucracy and multiple taxation (Figure 3).

**Option 4:** Increasing user fees for Small Islands such as $50 per guest per day - $75 for Mnemba island. This option would generate significant revenues as indicated in the figure below. However, the

implications need to be explored in detail including having in place the necessary facilities and well packaged and marketed products suite that would attract a unique visitor class or group willing to pay such fees (Figure 3).

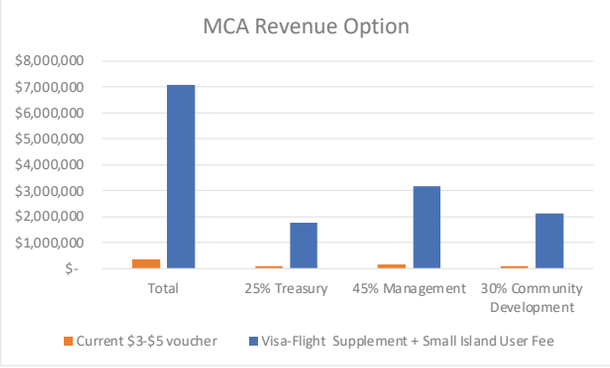


Figure 3: Revenue collection scenario under options 3 & 4
Source: Dr. Makame O. Makame, 2022

The second component of the proposed Finance Solution focuses on establishing and operationalizing the "Digital Voucher System" for improving collection of tourists entry fees for the MCAs and terrestrial PAs. Its rationale is anchored on the observations that the current system/mechanism of fees collection is ineffective characterized by well-noted leakages of the entrance fees being collected, partly due to the surrounding challenges.

ii) **Objective**

To review and reform the entrance fee structure and adopt a technology-based fee collection system (Digital Voucher System) to enhance sustainable revenue collection with high potential for adequate re-investment to biodiversity conservation.

iii) **Expected Financial Results**

The FS will enhance additional revenue and increase contributions to conservation through adequate re-investment for biodiversity financing. In the process, it will enhance better delivery and realignment of expenditures.

iv) **Next step and key actors:**

For the component of reviewing the entry fee structure, the proposed FS would urge undertaking key activities; i) a detailed Willingness-To-Pay (WTP) survey; ii) a rapid yet informative study to provide detailed benchmark information on the current fees' situation (tourist fee per adult, child, local, film crew, etc.), number of tourists currently paying the fees per year, the amount of fees collected per year and the modalities of disbursement. This will help development of the rationale and options for the fee structural reform, its potential, and the key legal steps to undertake for the reform; iii) undertaking consultative approaches (engaging consultants, consultative/stakeholders' engagement workshops, decision-making meetings, etc.); iv) develop information per PA needed since each PA has different entrance fees, different number of visitors, different financial needs for their management, and different revenue-sharing agreements; v) preparation of communication materials for a new structure and capacity building for potential implementers of the new structure (workshops/seminars, etc.); and vi) developing and implementing an effective M&E framework both for monitoring collections and tracking compliance.

The second component under the proposed FS (Digital Voucher System) would also need undertaking key activities: carry out rapid assessment of the existing fees collection mechanism(s) to uncover key issues and lessons including leakages to inform the establishment and operationalization of the new system; b) design the web-based platform; c) build capacity to users and enforcers, iv) set up a specific account to collect fees for protected areas, d) review and customize the new system with relevant working tools/documents (regulations, guidelines, user manual, etc), and v) develop and implement M&E framework.

The MoBE&F (responsible for MCAs), MAINRL (responsible for Terrestrial PAs) and the MoF&P will collaboratively lead its establishment and implementation. Other actors include Department of Tourism, Commission for Tourism, MCA/PA Managements, Zanzibar Association of Tourism Investors (Tour Operators and other Tourism-related Investors) and Tour Guides Associations.

The action plan and estimate budget are indicated in Table 18 below.

**Table 18: Action plan and budget for establishment and implementation: Reviewing Entrance Fee Structure and Digital Voucher System**

ACTION PLAN AND BUDGET

Target 18: By 2026, financial resources in support of biodiversity programmes significantly increased; and
Target 1: By 2026 at least 20% of the population is aware of the importance of biodiversity and its impact on human wellbeing and socio-economic development of Zanzibar;

| Activities | Output | Timeframe | | | | | Budget (x000) | | | | | Funding source | Responsible actor/s |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2022 | 2023 | 2024 | 2025 | 2026 | 2022 | 2023 | 2024 | 2025 | 2026 | | |
| *Preparation Stage:* | | | | | | | | | | | | | |
| Prepare an implementation proposal | Proposal | X | | | | | 54,400 | | | | | RGoZ & Donors | MoBE&F, MAINRL and MoF&P, DoT, CoT |
| *Implementation:* | | | | | | | | | | | | | |
| Willingness-To-Pay Survey for the fee and evaluation of existing collection mechanism | WTP Report | X | | | | | 65,600 | | | | | RGoZ & Donors | MoBE&F, MAINRL, and consultants |
| Consultative and stakeholders' engagement (Fee structure & Digital Voucher System) | Reports | X | | | | | 67,700 | | | | | | |
| Design and operationalize the web-based platform for the Digital Voucher System | Web-based platform | | X | | | | 70,000 | 80,000 | | | | | |
| Review relevant Regulations and Guidelines and implementation framework | | | X | | | | 35,000 | 35,000 | | | | | |
| Communication materials, media and websites | Reports | | X | | | | | 22,000 | | | | | |
| Capacity building to enforcers and users: workshops/seminars | Reports | | X | X | | | | 25,000 | 35,000 | | | | |
| Develop and implement M&E framework to monitor collections and track compliance | M&E plan and reports | | X | X | X | X | | 25,000 | 25,000 | 25,000 | 25,000 | | |
| **TOTAL** | | | | | | | **257,700** | **142,000** | **60,000** | **25,000** | **25,000** | | |

### 4.6 Review and strengthen revenue retention Scheme for MCAs and Terrestrial PAs

***Overview***

The current mechanism of re-financing conservation in PAs from the central government where all the monies collected are directed, seems to take a long process. The FS thus aims to develop an effective and efficient retention framework for PAs to ensure timely and adequately financing conservation activities in the respective PA. Lessons from a similar revenue scheme at Jozan-Chwaka Bay National Park and an existing financial regulation would ensure its establishment and operationalize. The key steps would include; proposal, an assessment of the existing Financial Plan and funding requirements per PAs, preparing guidelines and disbursement modalities, implementations and M&E Framework. The FS will enhance additional revenue and ensure better delivery.

i) **Context:**

There is a high need for effective refinancing for both marine and terrestrial protected areas. PAs with the scheme would assure reduced length of re-financing process from the central government for conservation. Similar revenue scheme at Jozan-Chwaka Bay National Park has been reported to have significant positive impact to conservation, community and the finance resources for conservation.

ii) **Objective:**

The Finance Solution aims to increase the financial capacity of respective PAs' management to conserve biodiversity under their jurisdictions. It aims to develop an effective and efficient retention scheme/framework for the MCAs/PAs for re-financing conservation.

iii) **Expected Financial Results:**

It will enhance additional revenue and financial resources for

biodiversity and benefit sharing with communities and ensure better delivery on conservation objectives.

iv) **Next step and key actors:**

Evaluating the Financial Plan for each earmarked PA to determine their funding requirements (amount and timing of that funding) in relation to the income sources); develop a Financial Plan for each PAs to establish the income sources and funding requirements; engage key stakeholders'; institutionalize the retention framework/fund scheme including capacity building for implementers; prepare guidelines and disbursement modalities.

The MoBE&F, MAINRL and MoF&P will collaboratively lead and manage the establishment and operationalization of the FS. The action plan and estimate budget are indicated in Table 19 below.

**Table 19: Proposed action plan and budget for establishment and implementation of FS on Revenue Retention Scheme for PAs**

| ACTION PLAN AND BUDGET | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Target 18: By 2026, financial resources in support of biodiversity programmes significantly increased;<br>Target 5: By 2026, the rate of degradation and fragmentation of ecosystems and the loss of habitats is significantly reduced | | | | | | | | | | | | | |
| Activities | Output 2022 | Timeframe | | | | | Budget ("000") | | | | | Funding source | Responsible actor/s |
| | | 2023 | 2024 | 2025 | 2026 | 2022 | 2023 | 2024 | 2025 | 2026 | | | |
| *Preparation Stage:* | | | | | | | | | | | | | |
| Prepare an implementation proposal | FS Proposal | X | | | | | 54,425 | | | | | RGoZ & Donors | MoBE&F, MAINRL and MoF&P, DoT, CoT |
| *Implementation:* | | | | | | | | | | | | | |
| Carry out an assessment of the existing Financial Plan and funding requirements of each PA | Revenue Retention Scheme Report | X | | | | | 66,700 | | | | | RGoZ & Donors | MoBE&F, MAINRL and MoF&P |
| Consultations and stakeholders' engagement workshops | Stakeholders' consultation reports | X | | | | | 49,600 | | | | | | |
| Develop the retention scheme | Retention scheme | | X | | | | | 65,000 | | | | | |
| Prepare guidelines and disbursement modalities | Guidelines for revenue retention framework/ scheme | | X | | | | | 41,760 | | | | | |
| Capacity building for implementers – workshops and seminars for executives and technicians | Capacity building reports | | X | X | | | | 90,200 | 90,200 | | | | |
| M&E Framework | M&E plan | | X | X | X | X | | 55,440 | 55,440 | 55,440 | 55,440 | | |
| TOTAL | | | | | | | **170,725** | **257,400** | **145,640** | **55,440** | **55,440** | | |

## D. Ministry of Agriculture, Irrigation, Natural Resources and Livestock (MAINRL)

Below is the list of prioritized finance solutions under the MAINRL:

i) *Crowdfunding for Community Forest Management Areas (CoFMAs)*

ii) *Establish Payment for Ecosystem Services (PES) Programme for CoFMAs*

### 4.7 Crowdfunding for Community Forest Management Areas (CoFMAs)

***Overview***

Crowdfunding (CF), as one of the popular sources to support biodiversity conservation in the world, would suit to CoFMAs in Zanzibar to safeguard important habitats for biodiversity, corridors and/or buffer zones around core protected areas. Most of the CoFMAs are financially incapacitated for effective implementations. The FS aims to raise financial resources as a contribution for addressing one specific biodiversity issue (tree planting, mangroves restoration, endangered species, etc) in one or more than one CoFMAs. To be successful key players will be involved: crowdfunders (e.g. partners, donors, investors, tourists, private and public institutions, etc); Crowdfunding platform such as through the People's Bank of Zanzibar (PBZ); and sponsors including the BIOFIN Global office and UNDP Co who would support the designing and crowdfunding campaigns. The key steps would include: planning for the CF, testing and launching, implementation and management, and M & E. The FS is expected to generate additional revenue to support one predetermined specific conservation issue in the specific COFMA (e.g., endangered species, megafauna, critical habitat, etc).

i) ***Context of the finance solution***

Designing and executing crowdfunding for addressing specific and well-defined biodiversity conservation challenge in specific COFMA in Zanzibar is deemed important. Crowdfunding finance solution has been reported a useful source of finance resources for specific conservation-related projects elsewhere. For Zanzibar, each COFMA has at least one specific conservation-related challenges that would qualify for specific crowdfunding campaign. That is, one crowdfunding session would be designed for specific conservation challenges in specific CoFMAs. For instance, each of the following would qualify for its own crowdfunding campaign:

- Planting targeted number of mangroves trees in specific critical habitats and degraded areas such as mangroves along the coast and beach areas. This would involve tourism-related investors and well-wishers of Zanzibar.
- Endangered species and charismatic megafauna: Some CoFMAs are critical for the conservation of key endangered species and charismatic megafauna such as the Pete-Jozan COFMA. For instance, the red colobus monkey (Procolobus kirkii), the flagship species for conservation in Zanzibar, since the mid-1990s, is found in Jozan-Chwaka Bay National Park, but its home-range expands to the neighboring CoFMAs. It is in the IUCN Red list as endangered based on the low number of individuals, and the limited and highly fragmented distribution range.

The FS will capitalize on donations-based crowdfunding where private organizations and companies (inside and outside Zanzibar) whose main activities depend on biodiversity and healthy ecosystems in Zanzibar, and the well-wishers of Zanzibar. The prioritized crowdfunding campaign will be focusing on specific biodiversity-related challenge to be addressed in the selected CoFMAs. It will have targeted figure of finance to be raised depending on the nature of the targeted conservation issue.

The CBD 5$^{th}$ and 6$^{th}$ National Reports emphasize on actions necessary with respect to the key Biodiversity Conservation Targets (i.e. Conservation, Access and benefits sharing and Sustainable use). They emphasize on strengthening the capacity of local communities to manage protected areas (e.g., Parks and reserves, CoFMAs and MPAs in Zanzibar), mainly forests and wildlife species including birds in the IBAs. The National Forestry Policy of Zanzibar (1996) and the Forest Resources Management and Conservation Act No. 2 of 1996 promote biodiversity conservation in core protected areas and CoFMAs that buffer the core PAs and in corridor areas. The CoFMAs provide an important opportunity to engage communities in a structured management of fragile forest habitats.

To be successful, the following key stakeholders will be considered:

- ***Crowdfunder:*** The BIOFIN team in Zanzibar will consider potential partners, donors, investors, tourists visiting and those just left, private and public institutions can invest and/or donate as well.

- ***Crowdfunding platforms:*** During its design, the team will consider the People's Bank of Zanzibar (PBZ) to use its e-Donation platform (online platforms) connecting the crowdfunders with the beneficiary or investee. The Bank may charge commissions for participation and/or on interest/dividends.

- ***Sponsors:*** BIOFIN Global, and UNDP Co, would support in designing and running crowdfunding campaigns.

ii) ***Objectives of the finance solution***

The proposed crowdfunding FS aims to raise financial resources as a contribution on addressing COFMA-specific biodiversity-related challenge. The lead DFNR through the Ministry (MAINL) would sign an agreement or MoU with the People's Bank of Zanzibar (PBZ) to use its e-Donation platform in the campaign as a crowdfunding method to facilitate the donation processes. The campaigns would target specific audiences likely to have interest or stake to the specific biodiversity-related challenge, both local and international, via online. Different steps, actions and milestone for its establishment are elaborated in subsection (iv) below. During its design process, the management of the fund raised will be stipulated. Likewise, the financial need will be elaborated for the earmarked challenge.

Below are examples of the key areas that the FS aims to support:

- Review and strengthening a framework for a collaborative role played by the Department of Forestry and Natural Resources (DFNR) and corresponding District Council (s) in which the CoFMAs are located, for the supervision of the implementation of CoFMAs. The supervision is a shared responsibility between the two to; a) monitoring the implementation of CoFMAs, b) assisting communities in the management of lands under CoFMAs, c) enhancing capacities, and d) providing technical assistance on issues related to biodiversity conservation, forests and environmental management, and climate change

- Contribute to improving the capacities of respective Shehias (villages) Conservation Committees (SCCs), District Councils and DFNR for the implementation, monitoring and evaluation of CoFMAs.

- Improving the capacities of SCCs to raise and manage financial resources, e.g income from fees and fines

- Promoting the adoption of income generating and alternative livelihoods activities aiming to reduce pressure to specific wildlife habitat for specific biodiversity resource of specific conservation status such endangered species, or of critical endemism. E.g. Habitats for the red colobus monkey (*Procolobus kirkii*) in Jozan-Chwaka Bay National Park.

- Support in priority CoFMAs to increase or maintain specific natural forest and mangrove cover and sustain the flow of ecosystem services, while supporting livelihood diversification

- Increase level of conservation engagement through extension services to communities with CoFMAs

iii) ***Expected financial results***

This FS will generate additional revenue to achieve predetermined target for specific conservation challenge (endangered species, megafauna, critical habitat, etc) in the specific COFMA. Crowdfunding has been successful elsewhere to 56% - 80% of the predetermined target.

iv) ***Next steps, key actors and milestones***

The establishment of the finance solution for biodiversity conservation in CFMAs, will involve at least four main steps; planning, launching and testing, managing, and wrap-up (M&E) (Table 20).

- **Planning**

  - The planning stage is crucial as it reflects on the success of failure of the crowdfunding. For this solution in Zanzibar at least the following will be accomplished at this stage:

  - Detailed feasibility study to provide inputs to the actual planning for effective crowdfunding,

  - Prepare the roadmap and identify the target audience,

  - Selecting the partners for the crowdfunding process and determining agreements/legal implications of partnerships,

  - Specifying the scope and focus of the earmarked crowdfunding initiative,

  - Estimating the right platform to launch the campaign,

  - Budgeting and allocating resources for the crowdfunding, and

- Considering important risks likely to face the planned crowdfunding such as money laundering

- **Testing and Launching**

Launching of the crowdfunding will involve a testing for improvement of its design during the first campaigns, and make staff become more effective in the actual campaign's executions, to realize the established targets. The actual launching will involve preparations of communication materials such as compelling stories indicating the challenge and the affected communities (CoFMAs); quality video or blog posts prepared in popular versions and simple campaign messages; identification of effective medium or media for delivery, visibility impacts and setting of success finance targets.

- **Managing**

  - In managing the FS, building capacities of the key players/crowd funders, focusing on learning by doing, co-planning and co-managing the FS including communications and campaign management will be crucial.

  - The lead agency (DFNRNR) will ensure there is an established agreement with the crowdfunding platform, and the implementing partners to clarify accountabilities and responsibilities, especially with regard to the funds to be raised.

  - Establishment of a "smart crowdfunding platform" will be central as a payment base for donating the finance resources is crucial such as the ministerial or sector website or designing as a specific BIOFIN website in Zanzibar). Options for operationalization of the platform may include the RGoZ entering into an agreement with a reputable Crowdfunding Platform" to ensure realization of the set targets. Establishment of the platform may be facilitated by competent institutions such as the UNDP CO and/ or BIOFIN Global Team would be asked to facilitate the process.

- **Monitoring and evaluation**

The M&E will involve routine monitoring and reporting. Evaluations will be the midterm evaluation to assess progress and provide inputs i.e. lessons to improve implementation and ascertain the extent of success in relation to the set target. Terminal evaluation will be carried out in year five to evaluate the impact, document lessons learnt and the CF sustainability. Special evaluation may be commissioned as needed to provide specific input as may be requested by the partners.

The crowdfunding process will involve three main categories of actors; i) fundraiser, ii) the crowd finance resource contributors/donors, and iii) the intermediaries. All these actors will be led by the Department (DFNNR). The department will organize and lead the crowdfunding campaigns to mobilize private donations to support Biodiversity conservation in CoFMAs. The lead Department (DFNNR) will organize and manage the crowdfunding process, overseen by the MoF&P.

**Table 20: Proposed timeline for establishment and execution of the crowdfunding FS**

ACTION PLAN AND BUDGET

Target 13: By 2026, ecosystems that provide essential services that contribute to health, livelihoods and well-being are restored and safeguarded taking into account the needs of women, local and vulnerable communities

| Activities | Output | Timeframe | | | | | Budget ("000") | | | | | Funding source | Responsible actor/s |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2022 | 2023 | 2024 | 2025 | 2026 | 2022 | 2023 | 2024 | 2025 | 2026 | | |
| *Preparation Stage:* | | | | | | | | | | | | | |
| Support the planning for the CF: Conduct a rapid feasibility assessment that will include a roadmap and target audience; key partners; legal framework and implications of partnerships; scope of the CF; budget and resources allocation and; risks in implementation of the CF | Crowd funding plan | X | | | | | 36,530 | | | | | Public, private, Donors & ODAs | DFNRNR (MAINL), & MoF&P; BIOFIN Team, Consultants, TC, SC, MoF&P UNDP CO & Int'l Technical Advisor |
| Selecting and using an existing crowd funding platform – a platform for campaign launching and Stakeholders endorsement meeting | Crowd funding framework | X | | | | | 21,000 | | | | | | |
| Support development of the disbursement/utilization arrangements/ strategy to CoFMAs' activities | Crowd funding framework | X | | | | | 21,000 | | | | | | |
| *Implementation:* | | | | | | | | | | | | | |
| Support the testing and launching of the CF:<br>• Prepare Policy brief and communication materials – i.e. compelling story on the problem and affected communities; a documentary - video or blog post; communication medium or media;<br>• Establish finance targets | • Policy brief<br>• Brochures<br>• Leaflets<br>• A documentary -Video | X | | | | | 42,890 | | | | | | |
| Support implementation and management:<br>• build capacities of key players/crowd funders (e.g., communications and campaign management) | Number of trained communications team and partners | X | | | | | 19,560 | | | | | | |
| Prepare an agreement with the CF platform and partners and enter into agreement with a reputable CF Platform - payments base | Payments agreement with CF Platform | X | | | | | 21,000 | | | | | | |
| Support M&E for the CF<br>• undertake routine monitoring and reporting<br>• carry out Evaluations - the midterm evaluation to assess progress in relation to the set target<br>• carry out terminal evaluation to evaluate the impact and document lessons learnt and the CF sustainability<br>• Commission Special evaluation as may be necessary | • Physical progress reports<br>• Evaluation reports<br>• Special study reports | X | X | X | X | X | 25,440 | 25,440 | 25,440 | 25,440 | 25,440 | | |
| TOTAL | | | | | | | **187,420** | **25,440** | **25,440** | **25,440** | **25,440** | | |

## 4.8 Establish Payment for Ecosystem Services (PES) Programme for watersheds in CoFMAs and other forests generating significant water ecosystem service

***Overview***

Payment for Ecosystem Services (PES) is considered as an innovative financing mechanism for a reliable finance resource for sustainable management of watersheds/catchment forests such as those found in COFMAs and other forests in Zanzibar, in turn enhancing biodiversity conservation. Sustainable financing is needed to conserve the forests and ensure continual water flows and biodiversity therein. The PES aims to reduce the financial gap in the management of watersheds/catchment forests found in CoFMAs and other forests. Existing institutional and policy framework for watershed in CoFMAs and other forests, together with appropriate PES contracts to be considered based on the payment mechanisms will create an ideal opportunity for the FS implementations. The key steps would involve; a feasibility study to determine the flow of the water and potential buyers/payers, preparing an implementation plan and payment mechanism (s), preparing PES contracts based on the payment mechanisms, operationalization of the PES Model and undertake M & E. The FS will generate additional revenue contributing to conservation of the forests and biodiversity therein. It will also enhance avoidance of future biodiversity expenditure linked to forests degradations.

i) ***Context of the finance solution***

***Socio-economic and environmental context***

The RGoZ rely on coastal, marine and terrestrial ecosystem services that underpin its unique tourism and sustenance for livelihoods of more than 1.5 million people. The biodiversity and ecosystem services support national development policies and contributions to SDGs. They support a wide range of community livelihood and wellbeing, mainly rural communities that rely on the natural resource base such as community that play an important role in the daily life of the local populations. More than eighty percent of communities derive at least part of their livelihoods from forest-based activities. Most biodiversity ecosystems are affected by encroachment resulting from the proximity of communities to the protected areas or fragile ecosystems.

Degraded areas impact on biodiversity and a range of important ecosystem services in Zanzibar, including water quality and quantity, flood risk and food resources. The RGoZ has recently established COFMAs aimed to achieve the multiple goals including biodiversity conservation, ecosystem restoration and the recovery, improvement of ecosystem service and enhance community participation. As most of these CoFMAs were recently established, many conservation activities in the COFMAs are inadequately implemented due to financial gaps within the COFMAs, the DFNRNR and LGAs in Zanzibar. The COFMAs rely mostly on government budget which is low compared to the number of CoFMAs and the planned interventions. For instance, the budget allocation for COFMAs for the three fiscal periods (2017 – 2020) has been of an average of USD 1,600 per year.

The number of COFMAs established has gradually increased from 57 to 64 in 2021. The operations of CoFMAs and umbrella associations rely on charges from law enforcement activities which are low and unsustainable. Umbrella associations are registered community-based organizations, working with local communities in villages/Shehia forming CoFMAs. Inadequate finance resources impact the effectiveness of law enforcement activities and conservation practices in the COFMAs leading to continued illegal activities that degrade critical habitats and forest cover loss. Establishment and operationalization of COFMAs requires sustainable sources of finance. A 2014 study estimated that the annual forest change rate in Zanzibar was −0.46%, with forest loss being caused by a combination of factors including urban expansion, tourism related infrastructure, settlement, population growth, land conversion for agriculture expansion and increasing demand for forest products. This translates to reduced flow of ecosystem services derived from these habitats. Establishment and implementation of Payment of Ecosystems Services (PES) schemes in COFMAs and other qualifying forests will promote both biodiversity conservation and local community livelihoods.

Ecosystem services have been defined as the benefits people obtain from ecosystems, including those from provisioning services, regulating services, cultural services and supporting services (Millennium Ecosystem Assessment, 2005):

- Provisioning ecosystem services from forests produce tangible goods such as timber, fuelwood, building poles, mangrove lumber, honey and its products, or medicinal products whereas regulating services are useful in maintaining a stable ecosystem such as climate, protecting shorelines from storms and erosion,

or filtering excess nutrients like nitrogen and phosphorus;

- Supporting forest ecosystem services sustain the goods and services used by humans such as photosynthesis to support fisheries, soil and sand formation to aid terrestrial development;
- Cultural forest ecosystem services include mainly intangible benefits that humans gain from the forests such as aesthetics, tourism, research, recreation and education.

Different definitions of "payment for ecosystem (PES)" have been provided by many scholars. However, for the purpose of this finance solution, we adopt the definition provided in the report by Trends (2008). That, PES involves a series of payments to land or other natural resource managers in return for a guaranteed flow of ecosystem services (or, more commonly, for management actions likely to enhance their provision) over-and-above what would otherwise be provided in the absence of the payment. The novelty of PES arises from its focus on the 'beneficiary pays principle', as opposed to the 'polluter pays principle'. The PES principles stipulate that the providers of ecosystem services are compensated by the service users. The service that is being provided has to be clear and the contract between the provider and the receiver of the service binding. The PES FS will have a pro-poor focus aiming to offer the communities an opportunity to augment their income as stewards of their land by implementing practices to restore and maintain ecosystem services.

The BIOFIN policy and Institutional Reviews (PIR) recommended promoting PES as one of the mechanisms to address inadequate funding in biodiversity conservation. PES could be an opportunity to partly finance COFMAs to strengthen protection and conservation of forests. The PES initiative would be applied to tap 'payment' from the beneficiaries with the objective of such payment being channeled towards funding biodiversity related activities implemented by service providers. The PES initiative in Zanzibar will learn from success stories such as those implemented elsewhere including the Vietnam and Cameroon and also build on lessons from the previously PES initiative run in Zanzibar by CARE International during REDD+ pilot through Community Forest Management Arrangements (CFM), under the *Hifadhi Misitu* Zanzibar (HIMA) project. An example below provides promising success story from similar PES scheme in the mainland Tanzania:

*"A PES scheme operated through the Simanjiro Conservation Easement, located adjacent to Tarangire National Park, northern Tanzania. The private sector photographic and hunting tourism operators, working in collaboration with local NGO the Ujamaa Community Resource Trust, contributed funding to create a "community concession" in Terat Village. Villagers agreed to protect a 9,300-hectare portion of the short grass plains by controlling cultivation, charcoal production, and illegal hunting, in return for an annual fee of USD 4,500. An international conservation NGO, the Wildlife Conservation Society (WCS), contributes supplementary funding which is used to pay local game scouts, purchase equipment and provide training". Source: (USAID, 2018; Nelson, 2008, 2009; Sachedina and Nelson, 2012).*

***Legal and Policy context***

The PES model will be applied in COFMAs made of neighboring communities from Shehia/villages that co-manage the forest. The PES initiative/ contracts will be made between the COFMAs/forests authorities and buyers of the ecosystem service to be identified. The PES initiative in Zanzibar draws its premise from a number of policies and laws that include:

- **Forest Resources Management and Conservation Act No. 2 (1996)** that provides legal framework for biodiversity conservation in core protected areas and CoFMAs.
- **The Zanzibar Forest Policy (1996)** as the main instrument under the jurisdiction of the Department of Forestry and Natural Resources (DFNR) that guides management and conservation of forest resources, protected areas including CoFMAs.
- **Zanzibar Water Policy (2004)** that provides direction on water resources management. It recognizes water resource as one of the ecosystem services from watersheds and that protection and sustainable management of forests as key habitats in the catchments and wetlands create an opportunity for biodiversity management and socio-economic development in relation to water. PES is therefore considered as an innovative financing mechanism to establish a reliable finance resource for sustainable management of the watersheds/catchment forests such as those found in COFMAs.
- **The Zanzibar Local Government Policy (2012**) that aims to safeguard livelihoods and ecosystem services that include land, water, waste management, ocean, etc. Local Government Authorities (LGAs) work in collaboration with the DFNRNR to oversee implementation of

COFMAs. With limited capacity to finance the COFMAs in the LGAs, the PES initiative will serve as an avenue to support LGAs engagement if facilitating the CoFMAs.

- **Others include:** Zanzibar Environmental Management Act No.3 (2015), Zanzibar Climate Change Strategy (2014-2020) and Action Plan (2016-2021).

It is anticipated that implementation of PES initiative in potentially qualifying COFMAs will facilitate enforcement of respective bylaws and regulations set to protect forests in community lands under Shehias. It is also expected that the payments will provide incentives as alternative to extractive use to address poverty-reduction compensations through PES. The PES initiative will be a pioneering step in COFMAs and other watersheds to strengthen biodiversity conservation and ensure sustainable flow of the water ecosystems services. If this model is established and successfully operationalized, it is likely to generate significant revenue to pay for those involved in the protection and other conservation activities in their forest areas. The recent report produced by the United States Agency for International Development (USAID) East Africa Planning for Resilience in East Africa through its Policy, Adaptation, Research, and Economic Development (PREPARED) Program indicated that,

*" The evidence to justify and advocate for PES commonly involves four lines of reasoning and argument: the high economic value of ecosystem services, the willingness to pay for these benefits, willingness of landholders to accept rewards or compensation in order to modify their land and resource use practices, and the ability to generate sufficient funds to provide the levels and types of payment that would be acceptable and effective in achieving these goals"* (*Source*: USAID, 2018).

In addition, many recent experiences reported by AfDB, identified PES to be a promising mechanism for use in East Africa, highlighting a range of potential advantages and benefits such as raising new finance for landscape management (AfDB, 2015).

ii) ***Objectives of the finance solution***

The purpose of this FS in Zanzibar, starting with few pilot CoFMAs, is to reduce the financial gap facing the conservation of watersheds/catchment forests in CoFMAs and other forests that would enhance sustainable flow of the water ecosystem services for various users. The PES model payments will motivate communities and forest authorities undertake sustainable practices to conserve the forests.

iii)***Expected financial results***

The FS will generate additional revenue and avoid future biodiversity expenditure linked to forests degradations.

iv)***Key steps, actors and milestones***

The solution will involve the following steps (Table 21):

- Carrying out a feasibility study to define saleable ecosystem services (or bundle of services), identify availability of potential buyers/payers, and flow continuity of the identified ecosystem services so as to guide prioritization and piloting a few in a phased approach. The define legal and institutional arrangements and key challenges to implement the PES. Appropriate PES contracts will be considered based on the payment mechanisms that may include; i) Performance-based payments (e.g. flow of the services, biodiversity, etc), and (ii) Input-based payments such as land and forest coverage for conservation and management costs, etc. Implementation of this FS will be managed by the DFNR (MANL in collaboration with the MoF&P.
- Implementation will be piloted selected COFMAs and forests following the feasibility study.
- Implementation will involve a rigorous M&E framework to document success, lessons and inform scale up to other potential CoFMAs and forests.

**Table 21: Proposed timeline for establishment and implementation of PES Programme for CoFMAs**

ACTION PLAN AND BUDGET

Target 13: By 2026, ecosystems that provide essential services that contribute to health, livelihoods and well-being are restored and safeguarded taking into account the needs of women, local and vulnerable communities

| Activities | Output | Timeframe | | | | | Budget ("000") | | | | | Funding source | Responsible actor/s |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2022 | 2023 | 2024 | 2025 | 2026 | 2022 | 2023 | 2024 | 2025 | 2025 | | |
| Carry out a feasibility study:<br>• to define saleable ESs (or bundle of ESs); potential buyers/payers; and the flow of selected ESs;<br>• Prioritize the potential ESs for piloting in key CoFMAs<br>• Define the legal and institutional requirements<br>• Develop a ESs payment mechanisms | ESs feasibility study report | X | | | | | 61,300 | | | | | | DFNRNR<br>-MANL<br>MoF&P<br>COFMAs |
| Prepare an implementation plan and mechanism (s) for identified ESs in pilot CoFMAs and other forests | PES plan identified priority ESs | X | | | | | 21,000 | | | | | | |
| Support preparation of PES contracts: based on the payment mechanisms | PES contracts | X | | | | | 41,000 | 41,000 | | | | | |
| Support the operationalization of the selected PESs | List of revenues and benefits derived from implemented PES plan | | X | X | X | X | | 80,000 | 80,000 | 80,000 | 80,000 | | |
| Undertake M&E | Routine reports<br>Mid-term and Terminal evaluations Reports | X | X | X | X | X | 55,440 | 55,440 | 55,440 | 55,440 | 55,440 | | |
| TOTAL | | | | | | | **198,740** | **176,440** | **135,440** | **135,440** | **135,440** | | |

**C. Department of Environment (DoE), FVPO**

iii) *Establish and operationalize the public-private partnership frameworks for "Re-greening*

iv) *Zanzibar Program" (coastal and inland forests areas)*

v) *Identify and develop a new program for scaling up REDD+ initiative,*

vi) *Establish crowdfunding for the restoration of degraded coastal forests (mangroves) and beach areas,*

vii) *Introduce subsidies for clean energy sources (gas and electricity) for household energy (DoE, Department of Energy and Minerals (DoE&M), and DFNRNR (MAINRL).*

### 4.9 Establish and operationalize the PPP framework for "Re-greening Zanzibar Program"

***Overview***

The "green cover" that is formed by the forest cover including mangroves, coastal and terrestrial forests on the Zanzibar Island archipelago is under increasing pressure from human activities, leading to loss of biodiversity. Inadequate financial resources impose a big challenge to ongoing efforts to address the anthropogenic threats to the green cover and biodiversity in Zanzibar. The FS aims to support the implementation of the recently established "Green Ligancy Initiative in Zanzibar (2022 – 2027) for restoring "green cover" of the Zanzibar's land cover that will attract biodiversity. The PPP Department, established under the Zanzibar Planning Commission coordinating all the Public-Private Partnership projects implemented in Zanzibar provides an ideal environment for implementing the FS. Likewise, collaborative management partnership (CMP) will be useful to make the PPP framework successful. The main steps for establishment and implementation of the FS will include; proposal writing, feasibility study, reviewing and re-designing PPP modalities, preparing an implementation plan and PPP CMPs contracts/agreements, operationalization and undertaking M&E. The FS will enhance avoidance of future biodiversity expenditure due to habitats degradation and loss of tree cover. It will motivate partners realign their expenditures to those activities contributing to the Re-greening process.

i) ***Context of the finance solution***

The forest cover including mangroves, coastal and terrestrial forests on the Zanzibar Island archipelago is under increasing pressure from human activities, mainly overexploitation, agriculture, deforestation, lumbering, wood and charcoal extraction, unsustainable land-use practices including agriculture, and the impacts of climate change(URT, 2001, Kirui, 2016), Shifting agriculture has been reported to be responsible for much of the deforestation and coral rag degradation (Leskinen et al., 1997; Kirui, 2016). In addition, for the coastal areas, the decline and/or loss of forest cover are resulting from clearing for charcoal productions, pit sawing, and mining of salt, limestone, beach sand, and hydrocarbons salt mining and beach sand (URT, 2001, CARE, 2011, HIMA, 2014). These activities, from the coastal to the inland areas leading to habitat fragmentations and degradation are resulting in biodiversity loss and reduced flows of ecosystem services. For the mangroves, its increasing demand is depleting the mangrove forest cover areas leading to biodiversity loss in Zanzibar (RGZ, 2013).

The available reports show that during the 22-year period from 1989/90 to 2012, shifting agriculture and livestock herding were the main drivers for deforestation and land-use conversion in Unguja and Pemba (Tables 22a & b). Settlements expanded particularly in Unguja, mostly over agricultural lands, on lands previously under agroforestry production systems (RGoZ, 2013). These activities remove the protective vegetation cover, leaving the soil vulnerable to degradation. In Pemba, 74% of the land is cultivated, while in Unguja 42% is cultivated (The World Bank, 2014).

**Table 22: Land-use change in Unguja (a) and Pemba (b) Islands (1989/90 to 2012)**

(a) Unguja Island

| Land use cover category | Area 1989/90 | | Area 2012 | | Difference | |
|---|---|---|---|---|---|---|
| | ha | % | ha | % | ha | % |
| Coral rag forests | 85,254 | 54% | 70,042 | 44% | -15,212 | -18% |
| Mangroves | 5,829 | 4% | 5,274 | 3% | -555 | -10% |
| Tree plantations and high forests | 7,141 | 4% | 3,714 | 2% | -3,427 | -48% |
| Agroforestry and mixed woody vegetation | 38,328 | 24% | 35,441 | 23% | -2,887 | -8% |
| Agriculture and settlements | 21,714 | 14% | 42,363 | 27% | +20,649 | +95% |
| Other | - | - | 1,503 | 1% | +1,503 | - |
| **TOTAL** | **158,267** | | **158,337** | | | |

(b) Pemba Island

| Land use cover category | Area 1989/90 | | Area 2012 | | Difference | |
|---|---|---|---|---|---|---|
| | ha | % | ha | % | ha | % |
| Coral rag forests | 12,360 | 12% | 12,371 | 12% | +11 | 0% |
| Mangroves | * | * | 11,214 | 11% | * | * |
| Tree plantations and high forests | 2,235 | 2% | 3,843 | 4% | +1,608 | +72% |
| Agroforestry and mixed woody vegetation | 62,851 | 62% | 52,101 | 51% | -10,750 | -17% |
| Agriculture and settlements | 10,565 | 11% | 20,156 | 20% | +9,591 | +91% |
| Other | - | - | 1,484 | 2% | +1,484 | - |
| **TOTAL** | **101,168** | | **101,168** | | | |

** The results from the assessment of the mangrove area in Pemba in 1989/90 are inconclusive. Source: (RGZ, 2013a)*

***The need for the public-private partnership (PPP) in "re-greening Zanzibar program"***

Although different efforts have been practiced to address the different threats to biodiversity and loss of "green cover" of the Zanzibar Islands, aiming to enhance recovery of the vegetation, ecosystem and biodiversity at large, inadequate financial resources impose a big challenge. The Finance Need Assessment (FNA) report have identified a significant funding gap for addressing the biodiversity-related threats. Similarly, it has been acknowledged in many developing countries that the public sector alone cannot manage to address the challenges to the fullest level expected. In view of this, the RGoZ identified public-private partnerships (PPPs) as a means of developing infrastructure to meet increasing demand for public services within the constraints on government budgets. The PPP Department, established under the Zanzibar Planning Commission serves as a coordinating entity for all the Public-Private Partnership projects implemented in Zanzibar. Its main role is to ensure that PPP projects conform to RGoZ objectives. This finance solution will significantly support the implementation of the recently established initiative in Zanzibar, termed "Green Legacy Initiative" for the five years period (2022 – 2027). It aims to re-plant about n 12.5 million trees in strategic areas: along the roads, coastal areas, degraded areas, open areas, unrestored sand mining areas, botanic gardens, eroded areas, and at public and private institutions (schools, colleges, university and healthy centers).

A sustainable finance solution to support the different efforts for re-greening Zanzibar archipelago is thus needed to protect, manage and restore these forests to ensure biodiversity conservation and flow of ecosystem services. For Zanzibar, one possible solution is reviewing and strengthening the public private partnership (PPP) framework, processes, and structures for "Re-greening Zanzibar" by fighting deforestation, land degradations and undertaking habitats restorations including coastal areas, mangroves, wetlands and deforested inland areas. The initiative will bring up and put into practice the high potential of using PPP frameworks for re-greening the coastal and inland terrestrial environments in Zanzibar. The regreening process would enhance healthy environment to support biodiversity, human life and investments such as tourism.

***Potential key areas and mechanism for the PPP towards "re-greening Zanzibar"***

The rationale of the PPP frameworks is that, the government funding alone would not manage to "re-green" Zanzibar to an acceptable and sustainable level. It is, therefore, sensible to expect that the private sector, whose investments such as tourism depend on biodiversity and a healthy environment in Zanzibar, would become a substantial investor in the "Re-greening Zanzibar Program". This would need conducive policy environment and guidelines

to promote sustainable biodiversity-related socio-economic activities and land-use practices. The re-framed PPP framework will consider the following key areas:

- Reforestation (coastal, mangroves and inland forests)
- Agroforestry
- Forest farming
- Conservation agriculture
- Assisted natural regeneration (including mangrove forests)
- Residue/waste management (i.e. residues burning)
- Water management

With great focus to these areas, the revised PPP framework will ensure different projects mainstream environmental sustainability in two main ways: (i) By making investments that will collectively contribute to the medium- and long-term restoration and rehabilitation of degraded landscapes, and sustainable local income generation. This will steer promote community-centred initiatives that support effective co-management of wildlife and their habitats, improve land quality through reforestation, improving land cover and soil fertility, reducing human-induced pressures on protected forests and introducing SLM in agriculture and livestock management systems; and (ii) By developing and strengthening the capacity for implementation of designed PPP modalities to promote effective biodiversity and land use management to support Zanzibar's national development, as well as capacity to monitor and adapt land management approaches, and leverage investments for integrating Sustainable Land Management to maximize ecosystem services and biodiversity benefits.

Although the feasibility study will be undertaken at the foremost step, partly to come with different PPP modalities for the "re-greening Zanzibar Islands", collaborative management partnership (CMP) has been found successful PPP in some countries such as Rwanda. These are contractual arrangements between an authority (government, private or community such as CoFMAs) responsible for the management of a particular conservation area or environmental management areas, and a partner (private or NGO) to collaboratively manage it, including those activities such as restorations, protection, M&E, etc. The feasibility may find out opportunities for CoFMA-based CMPs, coastal and beach restoration CMPs (this may involve tourism investors in the area), agroforestry CMPs, etc.

ii) ***Objectives of the finance solution***

The FS aims to support the implementation of the recently established "Green Ligancy Initiative" for restoring "green cover" of the Zanzibar land cover. This finance solution will promote sustainable forest and land management practices to enhance recovery of vegetative cover and ecological processes of natural habitats from the coastal to inland terrestrial ecosystems leading to increased biodiversity, flow of ecosystem services, and potential revenues generation from socio-economic activities that depend on biodiversity and healthy environment. Since there are still gaps in the capacity and experience required for developing and implementing sustainable practices (SLM and SFM) at the required scale, the PPP would also think of collaboratively addressing the factors limiting the widespread adoption of this approaches (SLM and SFM) which have significant contributions to "re-greening Zanzibar coastal and terrestrial ecosystems: (i) ineffective land use planning (ii) weak enforcement of forest-related regulations, (iii) land tenure uncertainty, (iv) land- and resources-related conflicts (The World Bank, 2014).

iii)***Expected financial results***

The FS will enhance avoiding future biodiversity expenditure due to habitats degradation, loss of tree cover, including coastal forests and mangroves. Through PPP, the partners would ensure realignment of their expenditures to the various activities contributing to the "Re-greening Zanzibar Island": e.g., community tree planting (forestry) through the DFNRNR and CoFMAs for degraded areas, enhancing ecological recovery of natural habitats, biodiversity, flow of ecosystem services, and potential revenues. The DFNRNR (MAINL), DoE (FVPO) and the Zanzibar PPP Department (MoF&P) will lead and manage its implementation.

iv)***Key steps, actors and milestones***

- Feasibility study to ascertain the policy and institutional arrangements for the FS, PPP modalities for different re-greening projects from the coastal to the inland terrestrial ecosystems including collaborative management of watersheds, agroforestry, some CoFMAs, etc. It will also consider contractual agreements depending on the ecosystem or areas under the CMP (Table 23).
- Review and re-design PPP modalities for

specific areas for the “re-greening”activities

- Assessing Institutional and Technical Capacity.
- Structuring Agreements for collaborative management partnerships (CMPs)
- Support review of by-laws and guidelines for PPP modalities
- Implementing PPP agreements for pilot areas to be determined during the feasibility study.
- Support Capacity Need Assessment (CNA) and Capacity development plan for communities involved and implementing partners to ensure an effective implementation
- Develop the M & E framework in the context of reviewed and re-designed PPP

The main actors are the DoE (FVPO), DFNRNR (MAINL), and MoF&P who will collaboratively manage its implementation. This finance solution may be implemented along with “coral reefs restoration” under the PPP framework. In this case, the MoBE&F will collaborate for the component of coral reefs restorations.

Table 23: Proposed timeline for establishment and implementation of the PPP framework for "Re-greening Zanzibar" Program

| ACTION PLAN AND BUDGET | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Target 1: By 2026 at least 20% of the population is aware of the importance of biodiversity and its impact on human wellbeing and socio-economic development of Zanzibar | | | | | | | | | | | | | |
| Activities | Output | Timeframe | | | | | Budget ("000") | | | | | Funding source | Responsible actor/s |
| | | 2022 | 2023 | 2024 | 2025 | 2026 | 2022 | 2023 | 2024 | 2025 | 2025 | | |
| Carry out a feasibility study:<br>• Policy and institutional arrangements for PPP modalities in "re-greening Zanzibar" and coral reefs restorations<br>• Identify potential areas for re-greening and coral reefs restorations under PPP<br>• Determine modalities for different re-greening and restoration projects<br>• Assessing Institutional and Technical Capacity of partners for PPP modalities | Feasibility study report(s) | X | | | | | 36,530 | | | | | | DFNRNR -MANL MoF&P, DoE (FVPO), DoT, Commission of Tourism |
| Prepare an implementation plan and mechanism (s) /agreements for identified PPP collaborative management partnerships | Plan, and identified PPP CMPs | | | | | | 21,000 | | | | | | |
| Support preparation of PPP CMPs contracts/agreements | PPP CMP contracts | | | | | | 21,000 | | | | | | |
| Support operationalization of the designed PPPs CMPs; Capacity Need Assessment (CNA) and Capacity development plan (CDP) | CAN Report | | X | X | X | X | | 28,125 | 28,125 | 28,125 | 28,125 | | |
| Develop M&E framework and implementation | Routine reports Mid-term and Terminal evaluations Reports | X | X | X | X | X | 55,440 | 55,440 | 55,440 | 55,440 | 55,440 | | |
| **TOTAL** | | | | | | | **83,565** | **83,565** | **83,565** | **83,565** | **83,565** | | |

## 4.10 Develop a new program for scaling up REDD+ initiative

***Overview***

The proposed reviews, re-designing and scaling-up the REDD+ initiative in Zanzibar is in line with the Climate Change Fund and the proposed Blue Fund, anchored on lessons and experiences from the previous REDD+ in Zanzibar and elsewhere in the world. It has potential for biodiversity conservation and poverty reduction in rural communities. The FS aims to strengthen financial support to CoFMAs and other forests through re-designing focusing the use of co-benefit approach. The existing policy and institutional frameworks are conducive for reviewing, redesigning and scaling-up the REDD+ initiative. Key lessons reported from the previous REDD+'s in Zanzibar and elsewhere will be useful for a success.

The main steps will include; proposal and feasibility study, baseline information in CoFMAs, preparing agreements and modalities for co-benefits, developing proposals to secure additional financial resources, reviewing by-laws and guidelines, Capacity Need Assessment (CNA) and Capacity development plan (CDP), re-design and implementations, and M & E framework. The FS is expected to generate additional financial resources, enhance avoidance of future biodiversity expenditure due to deforestation and in ensures better spending of the financial resources for biodiversity.

i) ***Context of the finance solution***

***Background***

Climate change is one the main threats to biodiversity conservation in the world. It affects biodiversity, the species and ecosystems (terrestrial and aquatic) in which they are inhabiting (Lovejoy, 2006). Protected areas including MPAs and the biodiversity they protect, are increasingly being impacted by climate change (Bruno et al., 2028). A combination of different anthropogenic threats and climate change tend to exacerbate the impact on biodiversity and ecosystems. Climate change is a serious risk to economic growth, poverty reduction and management of natural resources worldwide. It poses the greatest challenge to the world's poorest countries. In the course of fighting against climate change impacts, the initiative named as Reducing Emissions from Deforestation and forest Degradation (REDD+) was adopted in 2007 by the Conference of Parties to the United Nations Framework Convention on Climate Change (UNFCCC) to reduce the rate and speed of forest loss due to climate change meanwhile promoting sustainable socioeconomic development in the tropics. The initiative has potential roles in conservation, sustainable management of forests, and enhancement of forest carbon stocks. To date, more than 350 REDD+ projects have been established and operationalized in more than 50 countries in the world tropics (Duchelle et al., 2018; Andrews 2020). The initiative has been drawing on a complex set of multilaterals, bilateral, private, corporate, foundation and domestic investment sources.

In 2009, Zanzibar had one of the first eight projects piloted as REDD+ initiative in the United Republic of Tanzania. The project, in Swahili named as "Hifadhi Misitu ya Asili (HIMA)" was designed to slow deforestation through poverty reduction, and to reduce greenhouse gas emissions through developing and strengthening the capacity of communities to manage their forests. It was run by CARE International, using a tailor-made participatory Forest Management (PFM) approach based on Community Forest Management (CFM) agreements, in collaboration with a local NGO (Jumuiya ya Uhifadhi wa Misitu ya Jamii Zanzibar (JUMIJAZA) and the Department of Forestry and Non-Renewable Natural Resources, and a San Francisco-based technical advisor.

Although the project managed to support the establishment and initial implementation of the Community Forests Management Areas (CoFMAs), interchangeably named as Community Forests Management Authority (CoFMA) for administrative context, its ending phase did not leave strong operationalization of the REDD+ in Zanzibar. The low financial capacity to manage the CoFMAs in Zanzibar needs a new approach to scale-up the REDD+ initiative, to ensure community benefits and biodiversity conservation. REDD+ Initiative, if well redesigned, still have potential to make the CoFMAs a viable option for biodiversity conservation and contributing to poverty reduction in rural communities. It has been appreciated that, the context in which REDD+ operates differs across countries in the world, hence, a need for a review and redesigning to the context of Zanzibar and current situation. This will need to be anchored on the lessons and experiences from the previous REDD+ in Zanzibar and elsewhere in the world to ensure its success.

***Socio-economic context***

Establishment and operationalization of REDD+ initiative in the tropics has been meant as a

strategy to address the climate change issues and socio-economic development. Climate change involves complex interactions between climatic, environmental, economic, political, institutional, social, and technological processes. For the piloted REDD+ initiative in Zanzibar the communities initially benefitted from motivation payments that were distributed either as community benefits (health facilities, mosques, madrassa) or as household payments or as household payments until when the project ended in 2014. On the other hand, the recent study in the former REDD+ pilot projects (Andrews *et al.,* 2020), and the PIR report for the BIOFIN in Zanzibar showed that threats to community forests and biodiversity therein persist, mainly due to inadequate financial resources since 2014 when the project ended. According to Andrews *et al.,* (2020), there had been no any carbon payments for the five years of the project period, for the reasons not mentioned by the authors. That, most of the communities did not benefit from the anticipated performance-based finance from voluntary carbon markets.

Nonetheless, communities have continued with establishment of CoFMAs, now increased to 64 (37 on Unguja and 27 on Pemba Islands). In order to excel this motivation, the current REDD+ plus need to evolve, to a newly recommended evidence-based approach/strategies: co-benefits; livelihoods, equitable benefit-sharing, tenure security, etc. (Andrews et al., 2020). This is a right time to redesign a program for an effective REDD+ implementation with two-folds positive impacts: community livelihoods, and biodiversity conservation in parallel with stable flows of ecosystem services. The proposed reviews, re-designing and scaling-up the REDD+ initiative in CoFMAS is in line with the Climate Change Fund and the proposed Blue Fund in Zanzibar. Once established and managed to collect adequate finance resources from different sources, the scaling up of the REDD+ would partly get the support from these funds.

Since Zanzibar is prone to climate change, the government is now reviewing and re-designing a new REDD+ project for scaling up in selected CoFMAs (Unguja and Pemba islands). This has a rationale that, some REDD+ projects elsewhere in the world such as those in Cameroon, have shown positive results for biodiversity conservation, ecosystem services, socioeconomic development of the involved communities and potential to generate public and private finance. The scaling up will still be drawing on a complex set of multilaterals, bilateral, private, corporate, and foundation for financial sources/aids. Efforts will also be made: i) to bolster the morale and effectiveness of partners (national and global), and ii) to ensure economic, ecological and institutional settings are in place.

***Legal and policy context***

The key lessons reported from systematic comparisons of REDD+'s empirical successes and failures elsewhere in the world noted key factors to re-consider in the proposed reviews in Zanzibar: i) the nature and structure of REDD+ projects; ii) the project scale and community involvement (e.g co-benefits); iii) dependence on market-based mechanisms rather than the co-benefits; iv) the extent at which their site-specific design features align with broader economic, social and/or cultural institutions, such as free markets, rule of law and public opinions. All these factors are considered to determine the success and appropriateness of different REDD+ designs anywhere, provided they are contextualized to the local situation. The reviews and redesigning REDD+ projects in Zanzibar will need to determine the specific contexts in which it would be effective during this time. Each CoFMAs in Zanzibar have the registration title and the respective shehias/villages have strong tenure rights to their forests, authority to make decision on the legal resources and land uses guided by the clearly defined land-use plans. The existing policy and institutional frameworks are conducive for reviewing, redesigning and scaling-up the REDD+ initiative in Zanzibar for biodiversity conservation, carbon sequestration and poverty reduction.

ii) ***Objectives of the finance solution***

The main objective the Finance solution is to strengthen financial support to CoFMAs through re-designing the REDD+ focusing the use of co-benefit approach to make a viable financial instrument for biodiversity conservation and community livelihoods. This will boost the morale of the communities to conserve community forests, ideal habitats for biodiversity and potential stable flow of ecosystem services contributing to socioeconomic development in Zanzibar. To achieve the objectives, the solution will employ a mixed approach (finance and non-finance mechanisms): PPP, volunteers, education, supporting tree planting/restorations, law enforcement, and improved carbon payments as a motivation to COFMAs.

iii) ***Expected financial results***

The solution will generate additional financial resources through the appropriately selected co-benefit sharing with the CoFMAs. The scaling up will

still be drawing on a complex set of multilaterals, bilateral, private, corporate, and foundation for financial sources/aids, hence additional funds to finance initial activities. The solution will as well enhance avoidance of future biodiversity expenditure due to deforestation and ensures better spending of the financial resources for biodiversity, ultimately increasing revenues from various ecosystem services. If well-arranged, portions of the revenues would be re-channelled to CoFMAs for biodiversity conservation and supporting environmental-friendly income generating activities, and hence poverty reduction

iv) ***Key steps, actors and milestones***

- Review and re-design the REDD+ based on lessons learnt for improvement of the previous carbon credits, considering co-benefits options for each CoFMA-and potential for successful implementation. The review will identify CoFMA-specific contexts in which the REDD+ project would be effective including economic, ecological and institutional settings in which the re-designed REDD+ project would be able to deliver the expected objectives (Table 24),
- Establish agreements and modalities for co-benefits between the private and public investments related to REDD+,
- Develop proposals and other strategies to secure additional financial resources especially at the initial establishment stages and/or strategic stages during implementation from multilaterals, bilateral, private, corporate, and foundations,
- Support review of by-laws and guidelines to accommodate sustainable operationalization and management of CoFMAs with REDD+ project(s), and sustainable use of the finance resources,
- Support establishment of baseline information (ecological and socio-economic data) for the qualifying CoFMAs for the M & E in relation to REDD+,
- Support Capacity Need Assessment (CNA) and Capacity development plan for communities involved and implementing partners to ensure an effective implementation,
- Develop REDD+ related financial management manual/tool for the CoFMAs
- Develop REDD+ focused Agreement framework for potential investors,
- Develop the M & E framework in the context of reviewed and re-designed REDD+ approach,

The main actors are the DoE (FVPO), DFNRNR (MAINL), and MoF&P who will collaboratively manage its implementation.

## Table 24: Proposed timeline for establishment and implementation of the REDD+ FS

| ACTION PLAN AND BUDGET | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Target 14: By 2026, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced | | | | | | | | | | | | | |
| Activities | Output | Timeframe | | | | | Budget ("000") | | | | | Funding source | Responsible actor/s |
| | | 2022 | 2023 | 2024 | 2025 | 2026 | 2022 | 2023 | 2024 | 2025 | 2026 | | |
| *Preparation Stage:* | | | | | | | | | | | | | |
| A proposal to review and re-design the REDD+ based on lessons learnt for improvement of the previous carbon credits, co-benefits options for each CoFMA-and potential for successful implementation | A REDD+ Proposal | X | | | | | 61,300 | | | | | | |
| *Implementation:* | | | | | | | | | | | | | |
| Support establishment of baseline information for the qualifying CoFMAs to facilitate REDD+ M & E | M&E Plan with baseline information | X | | | | | 32,060 | | | | | | |
| Prepare agreements and modalities for co-benefits between the private and public investments related to REDD+ | Developed modalities | X | | | | | 21,000 | | | | | | |
| Develop proposals and other strategies to secure additional financial resources especially at the initial establishment stages and/or strategic stages during implementation from multilaterals, bilateral, private, corporate, and foundations | Saleable proposals | X | | | | | 61,300 | | | | | Public, private, Donors & ODAs | DFNR (MAINL), DoE, MoF&P, & LGA, Donors, BIOFIN Team, Consultants, TC, SC, MoF&P UNDP & Int'l Technical Advisor, and REDD+ related investors, |
| Support review of by-laws and guidelines to accommodate sustainable operationalization and management of CoFMAs with REDD+ project(s), and sustainable use of the finance resources | By-laws and guidelines | X | | | | | 41,760 | | | | | | |
| Support Capacity Need Assessment (CNA) and Capacity development plan, and execute it for communities involved and implementing partners to ensure an effective implementation | Capacity Need Assessment Report and Capacity Development Plan | | X | X | X | X | 20,760 | 40,200 | 40,200 | 40,200 | 40,200 | | |
| Develop/review REDD+ related financial management manuals/tools for the CoFMAs | REDD+ related financial management manual | X | | | | | 20,760 | | | | | | |
| Develop REDD+ focused Agreement framework for potential investors related to the REDD+ initiative | Agreement framework with investors related to the REDD+ | X | | | | | 21,000 | | | | | | |
| Re-design and implement the REDD+ project/ initiative | | | X | X | X | X | | 105,200 | 105,200 | 105,200 | 105,200 | | |
| Develop the M & E framework in the context of reviewed and re-designed REDD+ approach | M&E Framework | X | X | | | | 21,000 | | | | | | |
| Implement the M & E framework | Routine reports, evaluation and study reports | | X | X | X | | 35,440 | 35,440 | 35,440 | 35,440 | 35,440 | | |
| TOTAL | | | | | | | **336,380** | **180,840** | **180,840** | **180,840** | **180,840** | | |

## 4.11 Establish crowdfunding for restoration of degraded mangroves and coastal forests

***Overview***

Although many NGOs, institutions as well as individuals are involved in the restoration of mangroves and coastal forests in Zanzibar using different approaches, the practices are not successfully sustainable due to inadequate financial resources that would ensure stable success across all the sequential stages from nurseries to mature trees. The true outcome of the restorations has not been realized. The FS aims to secure the finance resources to support ongoing efforts, particularly at strategic stages of the restoration where the financial inadequacy significantly makes the ongoing efforts unsuccessful. The FS will be built on the ongoing efforts under the existing policy and institutional framework in addition to already established involvement and collaborations with different partners, NGOs, local communities, investors, etc. The process will go through key steps; planning, launching and testing, managing, and M&E. The FS is expected to generate additional finance resource for restoration to achieve predetermined targeted number of trees (mangroves and forest) to be planted, managed and monitored to successful growth stages in intended areas.

i) ***Context of the finance solution***

Mangrove forests are present in 5,300 ha (3%) of Unguja and 11,200 ha (11%) of Pemba (RGZ, 2017a). Between 1990 and 2012, the mangrove area in Unguja declined by 550 ha (9%, 0.4%/y). In addition to the disappearance of mangroves in Unguja, a drastic reduction took place in growing stock, falling from 41 m3/ha in 1992/93, to 18.9 m3/ha in 2013, whereas in Pemba, the mangrove growing stock has remained stable at around 39 m3/ha (RGZ, 2013a). Despite having been gazetted and placed under conservation management, mangrove forests in Zanzibar continue to be a source of construction poles, fodder, fuelwood and timber for fishing vessels (The World Bank, 2014). Some mangrove areas have been over-exploited and damaged to such an extent that without human intervention no natural regeneration would occur and they would not recover their ecological functions (Mchenga and Ali, 2015).

Although mangrove forests are dynamic in that, degraded areas may recover naturally without actual planting of propagules (Kairo et al., 2001; Bosire et al., 2008; all cited in UNEP-Nairobi Convention/ USAID/WIOMSA, 2020), their restoration guidelines prepped by WIOMSA (UNEP-Nairobi Convention/ USAID/WIOMSA, 2020) emphases on mangroves planting, where:

- Natural supply of seeds or propagules are limited as a result of blockage of hydrological connection or lack of nearby mother trees,
- There is need to re-introduce valuable species that have been lost from an area, the so called 'enrichment planting,
- Severe erosion of the intertidal area has occurred necessitating planting mangrove to curb shoreline change,
- Mangroves are being managed for silvicultural purpose (i.e. to provide the desired wood products),
- Community may generate income from mangrove planting activities including establishing of nurseries and out-planting, and
- Planting can be used for educational or cultural purposes.

Different approaches of mangroves restoration have been suggested and practiced in different countries, including Tanzania that would be reviewed and customized to Zanzibar context, the ongoing approaches in Zanzibar get improved accordingly (Box 6):

**Box 6. Major approaches of mangroves restoration**

***a) Government Driven Initiatives:*** *a successful example has been reported in Mauritius. In Zanzibar, similar efforts have been constrained by the inadequate financial resources from the public budget.*

***b) NGO driven Initiatives:*** *This approach includes local and international NGOs leading restoration activities. It has been successful in Madagascar where it involved multiple stakeholders including regional and local authorities, community-based organizations, research institutes and the private sector. It has been providing financial and technical support to restoration projects. In Zanzibar, mangroves restoration campaigns by WIOMSA, like other WIO areas, has mostly been driven by aid agencies through either the initiatives of government, non-government organizations, community, or a mixture of all. Although there are other NGOs (e.g., ZACCA, ZAVECO, ZACEDY) and Sazani Trust, dealing with mangroves restoration in Zanzibar degraded areas along the coastal areas and beach erosion persist, due to unsustainable financial resources.*

***c) Community driven initiatives:*** *A successful example is from Mozambique where communities embark on mangrove restoration without or with little external support. It improved enough*

*to transform to a community Trust Find for mangroves rehabilitation, then into a community-based programme, that the government started supporting by allocating annual budget.*

d) ***Mixed Initiatives:*** *Good examples have been drawn from Kenya and Tanzania (e.g. Rufiji Delta) where government agencies, NGO's, funding agencies, and communities work together for mangrove restoration and management.*

e) *Sources: UNEP-Nairobi Convention and USAID (2019).*

Although many NGOs, institutions as well as individuals practice restoration of mangroves and coastal forests using different approaches in Zanzibar, mangrove restored areas are not in the sustainability due to inadequate financial support to various restoration stages and lack of alternative livelihood activities. Four key lessons have been selected from the above list of different approaches that worth considering to this finance solution in Zanzibar:

- Mangrove rehabilitation works better as a programme and not a short-term project, as it takes time for the communities to engage, build capacity and empower. Additionally, awareness and monitoring ought to be a continuous process. The proposed FS would support key strategic stages of the restorations.
- Partnerships are crucial particularly in the promotion of community engagement and capacity building in mangrove management and community access and user rights on forest resources
- Mangrove restoration must be complemented by other measures for effective management.
- Long-term monitoring of mangrove reforestation activities is essential to ensure success

All these lessons need sustainable financial support. The crowdfunding has recently emerged as one of the popular sources to support biodiversity conservation in the world. It refers to a campaign or modality of appealing the private sector to make direct contributions and donations, through a dedicated technology platform. The solution would be useful in contributing to the various efforts for mangroves restorations to ensure biodiversity conservation. The mangroves, coastal and beach beauty are key attributes for coastal and beach tourism activities including those tourism hotels. Hence, the restoration would have significant contributions to improved tourism performance by enhancing visitors' enjoyment and satisfaction along the coast and beaches.

***The need for crowdfunding campaigns***

Despite the growing efforts of coastal forests restorations, particularly mangroves in Zanzibar, the true outcomes have not been realized mainly due to inadequate financial resources that would facilitated all the restoration stages from nurseries to monitoring and evaluations in a long-time period. The ongoing efforts, through community environmental initiatives/group, are inadequately capacitated to overcome the rate of degradations, loss of coastal vegetation/mangroves and the beach erosion. Strengthening financial capacity from different financing mechanisms such as crowdfunding, for restoration of degraded coastal forests including mangroves and beach erosion control would enhance biodiversity conservation, restore the coastal and beach beauty to make appealing for tourism activities, which in turn have significant contributions to coastal community livelihoods.

The RGoZ is struggling to restore degraded coastal areas and controlling eroded beach areas as initiative for biodiversity conservation and livelihoods improvement for coastal communities. Some efforts are ongoing where mangroves seedlings are being collected and planted to degraded areas by involving community. Yet, the initiative has financial constraints. The efforts aim to safeguard coastal forests, especially the mangroves. The mangrove forests along the coast, if well restored and managed would enhance its capacity to protect the areas against coastal erosion, provide breeding ground and habitat for diverse marine species as well as flow of ecosystem services including food and raw materials for coastal communities' livelihoods.

***Proposed crowdfunding campaign for the restorations***

Based on the above-mentioned initiatives for restoration of mangroves and coastal forestsb (government driven, NGO- driven, community driven and mixed initiatives), one crowdfunding campaign would be designed for specific stages of the restorations program. This would include the review and implementation of the restoration plan covering components from the nursery establishment and management, planting to monitoring and evaluations. Along with the different optional types of the campaigns, the crowdfunding will consider the key stakeholders in order to be successful:

- **Crowdfunder:** The BIOFIN team in Zanzibar will

consider potential partners, donors, investors, private and public institutions can invest and/or donate as well.

- **Crowdfunding platforms:** During its design, the team will consider the PBZ to use its e-Donation platform (online platforms) connecting the crowdfunders with the beneficiary or investee. The Bank may charge commissions for participation and/or on interest/dividends.
- **Sponsors:** These will be important, such as BIOFIN Global, and UNDP Co, would support in designing and running crowdfunding campaigns.

The crowdfunding campaign would target a number of mangrove/coastal trees to be planted in specific critical habitats and degraded areas. This would involve tourism-related investors and well-wishers of Zanzibar. The campaigns will ensure adequate fund is obtained to ensure the planted trees are maintained for a predetermined number of years, e.g. 3- or 5-years period.

***Legal and Institutional context***

The finance solution will capitalize on donations-based crowdfunding where private organizations and companies (inside and outside Zanzibar) whose main activities depend on biodiversity and healthy ecosystems in Zanzibar, and the well-wishers of Zanzibar. The CBD 5th and 6th National Reports emphasize on actions necessary with respect to the key Biodiversity Conservation Targets (i.e. Conservation, Access and benefits sharing and Sustainable use). They emphasize on strengthening the capacity of local communities to manage natural resources mainly forests and wildlife species. Zanzibar Environmental Management Act No. 3 (2015) is the legal framework that guides environmental governance, management, and enforcement in Zanzibar including biodiversity conservation. It recognizes that Zanzibar rely much on coastal, marine and terrestrial ecosystem services that underpin its unique tourism and sustenance for the livelihoods of more than 1.5 million population. The Act addresses environmental governance, integrated coastal zone management, response to environmental emergency, application of environmental impact assessment tools, climate adaptation, conservation of biodiversity through the protection of coastal and marine resources and prevention of deforestation.

ii) ***Objectives of the finance solution***

The proposed crowdfunding FS aims to raise financial resources as a contribution on addressing the degradations of coastal forests (mangroves) and beach erosion. The lead department (DoE) in collaboration with DFNR would sign an agreement or MoU with the People's Bank of Zanzibar (PBZ) to use its e-Donation platform in the campaign as a crowdfunding method to facilitate the donation processes. The campaigns would target specific audiences likely to have interest or stake to the specific biodiversity-related challenge, both local and international, via online. Different steps, actions and milestone for its establishment are elaborated in subsection (iv) below. During its design process, the management of the fund raised will be stipulated. Likewise, the financial need will be elaborated for the earmarked challenge. The different partners, UNDP CO and the BIOFIN Zanzibar would support for the crowdfunding management costs.

iii) ***Expected financial results***

This FS will generate additional revenue to achieve predetermined targeted number of mangrove and costal forest trees to be planted, managed and monitored to a successful growth stage in intended areas. The DoE (FVPO), DFNRNR (MANL), and MoF&P will collaboratively manage its implementation.

iv) ***Next steps and key actors including a table of milestones***

The FS will involve at least four main steps; planning, launching and testing, managing, and wrap-up (M&E), (Table 25):

- ***Planning***

The planning stage is crucial as it reflects on the success of failure of the crowdfunding. For this solution in Zanzibar at least the following will be accomplished at this stage:

- Detailed feasibility study to provide inputs to the actual planning for effective crowdfunding,
- Prepare the roadmap and identify the target audience,
- Selecting the partners for the crowdfunding process and determining agreements/legal implications of partnerships,
- Specifying the scope and focus of the earmarked crowdfunding initiative,
- Estimating the right platform to launch the campaign,
- Budgeting and allocating resources for the crowdfunding, and

- Considering important risks likely to face the planned crowdfunding such as money laundering

- ***Testing and Launching***

  - Launching of the crowd funding will involve a testing for improvement of its design during the first campaigns, and make staff become more effective in the actual campaign's executions, to realize the established targets. The actual launching will involve preparations of communication materials such as compelling stories indicating the challenge and the affected coastal forests (mangroves) and beach areas; quality video or blog posts prepared in popular versions and simple campaign messages; identification of effective medium or media for delivery, visibility impacts and setting of success finance targets.

- ***Managing***.

  - In managing the FS, building capacities of the key players/crowd funders, focusing on learning by doing, co-planning and co-managing the FS including communications and campaign management will be crucial.

  - The lead agency (DoE, FVPO) will ensure there is an established agreement with the crowdfunding platform, and the implementing partners to clarify accountabilities and responsibilities, especially with regard to the funds to be raised.

  - Establishment of a "smart crowdfunding platform" will be central as a payment base for donating the finance resources is crucial such as the ministerial or sector website or designing as a specific BIOFIN website in Zanzibar). Options for operationalization of the platform may include the RGoZ entering into an agreement with a reputable Crowdfunding Platform" to ensure realization of the set targets. Establishment of the platform may be facilitated by competent institutions such as the UNDP CO and/ or BIOFIN Global Team would be asked to facilitate the process.

- ***Monitoring and evaluation***

The M&E will involve routine monitoring and reporting. Evaluations will be the midterm evaluation to assess progress and provide inputs i.e. lessons to improve implementation and ascertain the extent of success in relation to the set target. Terminal evaluation will be carried out in year five to evaluate the impact, document lessons learnt and the sustainability. Special evaluation may be commissioned as needed to provide specific input as may be requested by the partners. Three categories of actors include; i) fundraiser, ii) the crowd finance resource contributors/donors, and iii) the intermediaries. All these actors will be led by the Department of Environment (FVPO). The department will organize and lead the crowdfunding campaigns to mobilize private donations for the restorations. The lead Department (DoE) will organize and manage the crowdfunding process, overseen by the MoF&P.

**Table 25: Timeline for establishment and implementation of crowdfunding for restoration of degraded mangroves and coastal forests**

ACTION PLAN AND BUDGET

Target 13: By 2026, ecosystems that provide essential services that contribute to health, livelihoods and well-being are restored and safeguarded taking into account the needs of women, local and vulnerable communities

| Activities | Output | Timeframe | | | | | Budget ("000") | | | | | Funding source | Responsible actor/s |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2022 | 2023 | 2024 | 2025 | 2026 | 2022 | 2023 | 2024 | 2025 | 2026 | | |
| *Preparation Stage:* | | | | | | | | | | | | | |
| **Support the planning for the crowdfunding (CF)**: Conduct a rapid feasibility assessment that will include a roadmap and target audience; key partners; legal framework and implications of partnerships; scope of the CF; budget and resources allocation and; risks in implementation of the CF | Crowd funding plan | X | | | | | 61,300 | | | | | | |
| Develop restoration plan (nurseries, planting and M&E) either government driven, community driven or mixed approach | Restoration plan | X | | | | | 42,100 | | | | | | |
| Establish a crowd funding platform - establish a platform for campaign launching and Stakeholder's endorsement meeting | Crowd funding frame-work | X | | | | | 21,000 | | | | | | |
| Support development of the disbursement/ utilization ar-rangements/ strategy to mangroves restoration activities | Crowd funding frame-work | X | | | | | 21,000 | | | | | | |
| *Implementation:* | | | | | | | | | | | | | |
| • Support the testing and launching of the CF:<br>• Prepare Policy brief and communication materials – i.e. compelling story on the problem and affected communi-ties; a documentary - video or blog post; communication medium or media;<br>• Establish finance targets | • Policy brief<br>• Brochures<br>• Leaflets<br>• A documentary | X | | | | | 41,760 | | | | | Public, private, Donors & ODAs | DoE (FVPO), DFNRNR (MAINL), & MoF&P; BIO-FIN Team, TC, SC, MoF&P UNDP CO & Int'l Technical Advisor |
| • Support implementation and management: build capac-ities of key players/crowd funders (e.g., communications and campaign management) | Number of trained communications team and partners | X | X | | | | 20,760 | 50,200 | 40,000 | | | | |
| • Prepare an agreement with the CF platform and partners and enter into agreement with a reputable CF Platform - payments base | Payments agreement with CF Platform | X | | | | | 21,000 | 21,000 | | | | | |
| • Support M&E for the CF<br>• undertake routine monitoring and reporting<br>• carry out Evaluations - the midterm evaluation to assess progress in relation to the set target<br>• carry out terminal evaluation to evaluate the impact and document lessons learnt and the CF sustainability<br>• Commission Special evaluation as may be necessary | • Physical progress reports<br>• Evaluation reports<br>• Special study reports | X | X | X | X | X | 55,440 | 55,440 | 55,440 | 55,440 | 55,440 | | |
| TOTAL | | | | | | | **284,360** | **126,640** | **95,440** | **55,440** | **55,440** | | |

## 4.12 Introduce subsidies for clean energy sources (gas and electricity) for household energy

***Overview***

Different traditional sources of household energy, mainly fuelwood and charcoal account for more than 90 percent in Zanzibar as the second most driving factor that are contributing to loss of biodiversity through deforestation and forest degradations. This has been attributed to inadequate availability and poor access to affordable alternative sources of household energy. For the current threats to biodiversity, if subsidies to gas and electricity energy sources are not explored, improved and operationalized, the natural forests will continue getting cleared, degraded and lost, subsequently biodiversity loss. The finance solution thus aims to review framework on subsidies in the energy sector for strengthening unharmful subsidies on grid electricity, Oil and Gas for household energy in Zanzibar in order to safeguard natural forests, biodiversity therein and livelihood. For successful implementations, key sectoral policies and strategies that are in support of the establishment and implementation of the prioritized finance solution including the Zanzibar Energy Policy (2019). In addition, there is opportunities for the RGoZ through Zanzibar Electricity Corporation (ZECO) and Zanzibar Energy Sector Transformation Project No. P169561 to strengthen engagement of the private sector, NGO, investors and donors in energy development. The main steps for establishment and implementations would include; the feasibility study, detailed evaluation of the current subsidies, FS implementation proposal for the potential sources of support, operationalizing the selected unharmful subsidies, and M & E. The finance solution is expected to enhance avoidance of future biodiversity expenditure likely to result from deforestation for fuelwood and charcoal burning. The subsidies will make gas and electricity affordable for most of the households in order to safeguard the forests and biodiversity therein.

i) ***Context of the finance solution***

***Socio-economic context***

Fuelwood, charcoal and agricultural residues account for 90 percent of household energy consumption in Zanzibar and altogether are ranked as the second driving factor on deforestation and forest degradation resulting to loss of forest biodiversity (HIMA, 2014). There are many large users such as hotels, camps and bakeries which utilize huge quantities of fuel wood for their daily operations. Increasing fuelwood energy demand is triggered by inadequate availability and poor access to cheap alternative sources of household energy.

On the other hand, optimal utilization of energy from Liquefied Petroleum Gas (LPG), solar power and wind energy is limited by their associated high costs that are not affordable among majority of low-income earning households in Zanzibar. Although the traditional energy sources are inefficient, they opted by many In Zanzibar because they are cheap and locally available rather than efficient and modern energy sources such as LPG and electricity which are most expensive (Shuwena, 2013; HIMA, 2014). According to the Zanzibar Energy Sector Transformation Project (No. P169561), Project Information Document, (2020), households comprise around 85 percent of the total customer base for grid electricity and around 62 percent of the total power sales by ZECO in Zanzibar. ZECO buys power from TANESCO for Unguja and Pemba (RGoZ, 2020).

Although Zanzibar initiated and promoted alternative energy sources such as solar and energy saving stoves that reduce use of fuelwood and charcoal consumptions, it has not fulfilled the household energy needs, making pressure to natural forests for fuelwood and charcoal production persist. The subsidies on promoting efficient energy technologies, of particular wood efficient stoves, somehow, reduced deforestation from use of firewood and charcoal. However, it lacked sustainability. Another effort by forestry sector that subsidized liquefied petroleum gas (LPG), reduced deforestation from use of firewood and charcoal. It also lacked of sustainability.

Due to the growing demand in firewood and charcoal among the people in urban Zanzibar, it is obvious that if subsidies to alternative energy sources are not explored, improved and operationalized, the natural forests of Zanzibar will continue getting cleared, degraded and lost. It has been estimated that peri-urban and rural population cooking energy needs on biomass reached 40% and 96% respectively (HIMA, 2014). All-in-all, inadequacy of resources and low purchasing power of poor people in the urban and rural areas imposes a big challenge to rescue the forests in Zanzibar (Makame, 2007). Improvement of cost-reflective tariffs on grid electricity, tax incentives, and reduced prices of natural gas and associated accessories/facilities/ equipment for household uses, will increase access to clean household energy (grid electricity and natural gas) by a large number portion of the

population, reducing deforestation, wildlife habitats loss, and degradation. With all these challenges, the energy sector of Zanzibar would be useful to reconsider for subsidies in order to reduce pressure on the natural forests (mangroves, coral rag forests, and inland forests). The sector is an important economic sector for development and promotion of sustainable renewable energy resources. It is responsible for, i) rationalization of power tariffs to reduce dependence on wood as the main source of household energy, and ii) provision of cheap alternative and renewable sources of energy such as solar and wind development and promotion of energy saving technologies to reduce the use of fuelwood.

***Policy and institutional context***

Key sectoral policies and strategies that are in support of the establishment and implementation of the prioritized finance solution include the Zanzibar Energy Policy (2019), Zanzibar Environment Policy, Zanzibar Climate Change Strategy, the Zanzibar Forest Policy, Zanzibar Forest Policy, Zanzibar Agricultural Sector Policy, and Zanzibar Tourism Policy.

- ***The Zanzibar Energy Policy (2019)***

The policy focuses on providing guidance on formulation of comprehensive energy prices and taxes/levies to ensure financial and economic sustainability; ensuring reliable and guaranteed energy supplies to cushion the economy from external and internal disruptions of supply and price fluctuations. It also aims to develop and utilize existing and potential energy resources; provide incentives on energy conservation and increase energy efficiency including energy technologies and develop the necessary institutional capabilities by introducing appropriate **incentive** measures. It places high priority on development and use of indigenous energy sources such as renewable energy and fossil fuel resources. It pays attention to ecological and environmental safeguards in development of energy projects.

The sector oversees and coordinates all matters related to energy through the Zanzibar Electricity Corporation (ZECO), mainly electricity development, development of alternative energy sources, and promotion of sustainable renewable energy resources. However, the key challenges regarding its contribution to biodiversity conservation include;

- Inadequately subsidized costs for on-grid electricity connections (Tanzania Electric Supply Company Limited-TANESCO) that would reduce an existing high dependence on wood as the main source of household energy,
- Inadequate financial resources for alternative energy sources: solar, wind and renewable resources

Given that TANESCO is one of the main beneficiaries of biodiversity conservation especially water catchment forests, it would reconsider to subsidize tariffs for ZECO in Zanzibar to reduce pressure on natural forest, coastal and mangroves that are being harvested for fuelwood and charcoal, meanwhile considering welfare of the poor, women and marginalized community members. Subsidies to other sources of household energy mainly solar, wind and renewable resources need be considered. Notably, the current World Bank support to increase access to electricity in Zanzibar is timely enough to support this finance solution (Zanzibar Energy Sector Transformation Project No. P169561).

- ***The Zanzibar Vision 2020***

The Vision's policy on sustainable provision of energy is to ensure adequate, environmentally sound, alternative and sustained energy supplies for easing socio-economic development. For the renewable energy related provisions, the Vision aims to:

- Encourage R&D on non-wood energy sources (such as solar, wind power and biogas) and on energy efficient domestic alternative sources of energy, and
- Promote an efficient use of energy, ensure conservation of renewable and non-renewable energy sources and the protection of environment.

- ***Zanzibar Blue Economy Policy of 2020*** : This policy promotes sustainable use of marine energy, mainly the renewable energy and Oil and Gas, as one of policy five key thematic areas.
- ***Zanzibar Strategy for Growth and Reduction of Poverty (ZSGRP), (2016-2020):*** The ZSGRPIV now under preparation is expected to uphold and amplify these priorities as indicated in the National Development Vision 2050.

The framework to be reviewed regarding subsidies on household energy would emphasize that the subsides should be performance-based in that in

case there is no significant positive contributions to natural forests and biodiversity conservation, the would be cancelled.

ii) ***Objectives of the finance solution***

The finance solution aims to review framework and facilitate strengthening unharmful subsidies on various sources of household energy in Zanzibar, particularly grid electricity, Oil and Gas. Improvement of cost-reflective tariffs on grid electricity, tax incentives, and reduced prices of natural gas (LPG) and associated accessories/facilities/equipment for household uses, will increase access to clean household energy (grid electricity and natural gas) by a large number portion of the population, reducing deforestation, wildlife habitats loss, and degradation. The subsidies by the RGoZ, Private sector, NGO, investors, donors and ZECO will reduce dependency on biodiversity renewable resources for household energy. This would involve strengthening the private sector engagement especially in energy development that directly or indirectly support or benefit from biodiversity products and services.

iii) ***Expected financial results***

The finance solution is expected to enhance avoidance of future biodiversity expenditure likely to result from deforestation for fuelwood and charcoal burning. It will contribute to biodiversity conservation, gender, and climate resilience-related goals.

iv) ***Key steps, actors and milestones***

The steps for the finance solution implementation, lead agent, key stakeholders, and proposed timeline are summarized in Table 26 below. The Department of Environment (DoE, in the FVPO) in collaboration with the Department of Energy and Minerals (DoE&M), Zanzibar Electricity Corporation (ZECO), DFNR, Ministry of Lands, Water, Energy and Environment, and MoF&P will collaboratively manage its implementation. The solution may be implemented together with the REDD+ initiative solution.

**Table 26: Proposed timeline for establishment and implementation of subsidies for clean household energy sources**

| ACTION PLAN | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Target 5: By 2026, the rate of degradation and fragmentation of ecosystems and the loss of habitats is significantly reduced | | | | | | | | | | | | | |
| Activities | Output | Timeframe | | | | | Budget ("000") | | | | | Funding source | Responsible actor/s |
| | | 2022 | 2023 | 2024 | 2025 | 2026 | 2022 | 2023 | 2024 | 2025 | 2026 | | |
| Preparation Stage: | | | | | | | | | | | | | |
| Feasibility study proposal, and undertaking detailed feasibility study involving stakeholder engagement/consultations and validation workshops, etc. | Proposal | X | | | | | 45,000 | | | | | RGoZ & Donors | DoE, (FVPO), DoE&M, ZECO, DFNR, MoLWEE AND, MoF&P, BIOFIN Team, Consultants, TC, SC, UNDP & Int'l Technical Advisor |
| Supporting a detailed evaluation of the current subsidies, along with feasibility of different unharmful subsidies | Report | X | | | | | 45,000 | | | | | | |
| FS implementation proposal for the potential sources of support: RGoZ, national and international finance agencies and Donors | Proposal | X | | | | | 40,000 | | | | | | |
| ***Implementation:*** | | | | | | | | | | | | | |
| Support development of sectoral framework to mainstream the accepted subsidies | Report | X | | | | | 55,000 | | | | | | |
| Support operationalizing the selected unharmful subsidies | | | X | X | X | X | | 40,000 | 40,000 | 40,000 | 40,000 | | |
| Develop, operationalize M & E framework, | Evaluation Reports | X | X | X | X | X | 35,000 | 35,000 | 35,000 | 35,000 | 35,000 | | |
| Formulate and apply modalities for safeguarding the forests if subsidies are cancelled based on performance | Safeguard modalities and reports | | X | X | X | X | 35,000 | 35,000 | 35,000 | 35,000 | 35,000 | | |
| TOTAL | | | | | | | **255,000** | **110,000** | **110,000** | **110,000** | **110,000** | | |

## D. Ministry of Finance and Planning (MoF&P)

### 4.13 Review and strengthen CSR strategies for investors

***Overview***

Although significant contributions of CSR to various areas of socio-economic development projects have been reported in Zanzibar, less has been testified on biodiversity and environmental related projects. The reports in Zanzibar have recommended on strengthening the CSR framework. The finance solution aims to support the review and strengthening of the CSR framework/strategies to consider protection of terrestrial, coastal and marine habitats in the different socio-economic development projects supported through CSR in Zanzibar. The main opportunities available for its implementations include: investors are willing to support communities through CSR, a strong political will enough to have a plan for strengthening legal and policy environment to back-up the CSR; and an expected support by BIOFIN to develop a pipeline of good transparent biodiversity projects in community areas to receive CSR and capacity building. The main steps for establishment and implementations would include: a feasibility study to explore on different opportunities for improving the CSR arrangements; lobbying and awareness raising strategies for investors, communities and the government; improving modalities/ mechanisms for CSR, developing a pipeline of good transparent biodiversity-focused projects to receive CSR; capacity building, developing coordination arrangements, reviewing investment guidelines to address effective CSR. The FS will generate additional finance resources for communities, biodiversity and environment protection from the current 6% to at least 12% between 5 – 10 years. It will improve collaborations between investors, the Government and communities.

i) ***Context of the finance solution***

***Socio-economic context***

Corporate Social Responsibility (CSR) is gaining more awareness in Zanzibar as the investors are recognizing the important role it plays on their firms' performance (Abdallah and Mohamed, 2019). It is considered essential towards the success of corporations (Leka, 2016). Its essence is in making corporations part of the community in assisting its development through establishing projects, as a way of sharing part of their success to the marginalized communities. The CSR involves the contribution of the businesses to the society with the aim of promoting sustainable development economically through working together with the neighboring stakeholders such as the local community with the aim of improving their lives.

The corporations provide support to non-profit organizations implementing sustainable development projects including direct-giving programs, private foundations, and/or public charities. There are many corporate entities in Zanzibar that have annual CSR budgets that are set aside from their annual revenues where investment in CSR do boost hotels profitability mainly on return on asset (ROA) and returns on equity (ROE) contributed by the generated social and business value. NGOs, CBOs and even communities involved in biodiversity conservation can tap into CSR budgets of corporate entities to finance their operations such as supporting local community awareness and capacity building for natural resources and environment management for biodiversity co-management interventions such as in the coastal areas management where most hotel facilities are located.

Significant contributions of the CSR to various areas of socio-economic development have been reported in Zanzibar, notably less to biodiversity and environmental related projects. The CSR has been recorded as one of the FDI gains in Zanzibar over the past 20 years (RGoZ, 2019). According to Zanzibar Investment Report 2017, CSR amounted to USD 1.5 million In 2017, slightly higher than the amount recorded in 2016 by 5.2 percent (Table 31) in 2018 was USD 3,938.1 thousand, more than twice the amount donated in 2017. Interestingly, much of the CSR funds in the 2017 were absorbed by education, 27.3 percent; water, 25.2 percent and security, 16.1 percent. For the 2018, a substantial amount of the CSR was donated to road construction in 2018, which amounted to USD 805.5 thousand up from USD 4.5 thousand in 2017. Less amount was spent on social activities in the affected communities (Table 27).

Table 27: Corporate Social Responsibility Contributions (2015 – 2018)

| | 2015 | 2016 | 2017 | 2018 | Average | %share |
|---|---|---|---|---|---|---|
| Safety and security | 176.4 | 348.6 | 245.9 | 746.7 | 379.4 | 20.2 |
| Water | 89.9 | 393.2 | 383.7 | 505.2 | 343.0 | 18.3 |
| Road | 80.4 | 78.8 | 4.5 | 805.5 | 242.3 | 12.9 |
| Sports and development | 14.7 | 99.8 | 102.4 | 657.5 | 218.6 | 11.7 |
| Education | 48.0 | 128.7 | 416.7 | 277.8 | 217.8 | 11.6 |
| Health and welfare | 54.6 | 52.1 | 53.6 | 403.0 | 140.8 | 7.5 |
| Environment | 24.0 | 117.0 | 209.2 | 131.1 | 120.3 | 6.4 |
| Arts and culture | 81.6 | 83.4 | 67.9 | 188.1 | 105.3 | 5.6 |
| Other | 9.9 | 120.1 | 16.7 | 191.1 | 84.4 | 4.5 |
| Religious | 10.2 | 28.4 | 24.3 | 32.3 | 23.8 | 1.3 |
| **Total** | **589.7** | **1,450.1** | **1,524.9** | **3,938.1** | **1,875.7** | **100.0** |

*Source:* RGoz (2019)

The report noted lack of credible plans in need of financing and low transparency on funding channeled to local projects was one of the factors limited CSR financing. From the reported findings it is noted that the amount spent for the environment was very low. Specifically, its contributions to biodiversity conservation such as in coastal forests e.g. mangroves were not singled out. The reports did not mention whether those socioeconomic activities supported by CSR were selected partly considering biodiversity or environmental issues at least in areas of investment and neighboring communities.

However, the reports recommended that the observed gaps regarding the CSR call for more concerted efforts to enhance capacity of local communities to develop credible project proposals and accountability mechanism for the disbursed project funds. That, moral persuasion is highly needed to investors to deliver more to the surrounding communities for improved livelihood. The report emphasized that there is a need to prioritize areas for the CSR support and institutionalize the same for greater benefits to local communities. Unfortunately, the recommendations did not mention that at least those socio-economic development projects supported through CSRs should also be considered based on their potential contributions to biodiversity and environmental issues in place.

Key issues were drawn from reports that worth considering for this finance solution:

*a) Inappropriate mechanism in processing and utilizing resources provided through CSR* (RGoZ, 2019). *It* was reported that there is a need to continue encouraging investors to engage in CSR. This would be effective through effective mechanism in place.

*b) Low ability of local communities to develop saleable project write-ups to benefit from CSR* (RGoZ, 2020). It was suggested that this would be addressed through capacity building to local communities to prepare biodiversity-focused project proposals. In addition, a need for engaging investors and identifying priority areas for support under CSR with a view to maximize benefits to local communities. For this recommendation, biodiversity and environmental issues should be considered.

***Legal and policy context***

Although the practice of CSR is still largely voluntary in Zanzibar, it is being promoted for both local and foreign investments in different sectors. Investment in Zanzibar is governed by the Zanzibar Investment Promotion and Protection Authority Act 2018 (ZIPPA Act). The Zanzibar Investment Promotion Authority (ZIPA) has been established under section 3 of the Act and has been vested with the function of regulating, promoting and administering of investment activities in Zanzibar. The following examples promote for the CSR in Zanzibar:

- ***The Zanzibar Development Vision 2050 (ZDV50) has one aspiration related to CSR. It emphasizes*** Zanzibar to have a strong local content in the tourism industry, supported by appropriate

incentives and awareness programmes for all stakeholders while ensuring corporate social responsibility (CSR) and investment.

- ***The Blue Economy Policy of 2020*** recognizes the role of CSR for its implementation, to be supported by different MDAs and related stakeholders. It empowers the MoP&F and special departments (e.g. Tourism Division, Commission of Tourism) to undertake mobilizing community support to ensure corporate social responsibility RGoZ, 2020).

- ***The Zanzibar Oil and Gas (Upstream) policy of 2016:*** The Policy recognizes the CSR as one the universal precepts that guided its formulation (RGoZ, 2016). The policy points out that there should be joint concerted efforts between the Government and the oil and gas industry in working to improve operating practices and corporate responsibility towards protection of terrestrial and marine habitats. The same would be considered to other investments such as tourism along the coast and beach areas.

- This finance solution would therefore be established and framed based on the Zanzibar Oil and Gas (Upstream) policy of 2016. The policy promotes for CSR interventions in targeted projects which address the actual needs and interests of the affected communities. It emphasizes that the approach should best be carried out in collaboration with the Government.

- According to the Africa Press-Tanzania of **24-02-2021,** there has been a prospect regarding a law to support CSR in Zanzibar. It reported that *"In efforts to have companies fully implement their Corporate Social Responsibilities (CSR) in Zanzibar, the Minister for Labour, Economy and Investment Mr Mudrik Soraga has said that the government will soon introduce a law that backs the directive. "We want to ensure investors practice the CSR for the benefit of residents, where such investors run the projects. Currently we have no law or policy on CSR," Mr Soraga, said, the plan is to compose written laws and present it to the House of Representatives before the 2021/2022 budget session in June this year, adding that the government has already decided to move forward with the plan for the benefit of people"* (*Source*: https://www.africa-press.net/tanzania/policy/corporate-social-responsibility-law-in-offing-minister, accessed: 17th May, 2022).

Generally, there are opportunities for a successful implementation of the FS: a strong political will by the RGoZ enough to have a plan for strengthening legal and policy environment to back-up the CSR; the expected support by BIOFIN to develop a pipeline of good transparent biodiversity projects in community areas to receive CSR and capacity building to communities will contribute to an effective implementation of CSR.

ii) ***Objectives of the finance solution***

This finance solution aims to support the review and strengthening of the CSR framework/strategies to consider protection of terrestrial, coastal and marine habitats in the different socio-economic development projects supported through CSR in Zanzibar. The strategies would enhance capacity of local communities to develop credible biodiversity and environmental focused socio-economic project proposals. The finance solution also aims to review and strengthen accountability mechanism for the disbursed project funds. It would prioritize areas for the CSR support and institutionalize the same for greater benefits to local communities, biodiversity and environment at large. These objectives are in line with the Zanzibar Oil and Gas (Upstream) policy of 2016 (RGoZ, 2016), Zanzibar Investment Reports, 2017, and 2019 (RGoZ, 2017; and RGoZ, 2019), the Zanzibar Development Vision 2050 (ZDV50) (RGoZ, 2020) and the Blue Economy Policy of Zanzibar of 2020 (RGoZ, 2020).

iii) ***Expected Financial Solution results***

The FS will generate additional revenue in that, improved CSR from corporate foundations (tourists hotels, tour companies, fishing, and other industries), through corporate donations, and funding charitable activities contributing to biodiversity and environmental protection from the current 6% to at least 12% between 5 – 10 years. It will increase communities' commitments, in turn, leading to the enhanced business environment, hence more revenues to investors and government. It will improve collaborations between investors and the Government regarding CSR for communities, biodiversity and environment, hence continues financial support to biodiversity/environmental focused community development projects.

ZIPA (MoF&P) and biodiversity-related sectors (MoBE&F, DFNR-MAINL, DoE-FVPO, Department of Tourism and Commission of Tourism) will collaboratively manage its implementation.

iv) ***Key steps, actors and milestones***

The process will undergo the key steps as indicated in Table 28 including:

- Feasibility study will explore on different opportunities for establishing and/or strengthening the finance solution. Specifically, it will consider; i) inclusion of investors (tourism and business councils) under the platform of corporate social responsibility. The platform will be needed for regular meetings to bridge the gap between investors and the government regarding CSR (ZATI, Tourism Board, oil & gas, etc); ii) opportunities for strengthening the collaborations of key investors with the Government in improving CSR contributions to those projects which address the actual needs and interests of the affected communities meanwhile considering their support to biodiversity and environment; iii) Community support mobilization towards corporate social responsibility; and iv) need for reviewing an Investment guidelines
- Lobbying and awareness raising strategies for investors, communities and the government
- Developing a pipeline of good transparent biodiversity-focused projects to receive CSR
- Establishing/improving modalities/mechanisms and coordination arrangements for CSR in support to community projects meanwhile considering the protection and management of biodiversity terrestrial, coastal and marine ecosystems. This will involve stakeholders' consultations, lobbying and awareness raising.
- Reviewing investment guidelines to ensure they adequately address the CSR implementation by investors. This will involve stakeholders' consultations, lobbying and awareness
- Develop and implementing an effective M & E framework

**Table 28: Proposed timeline for establishment and implementation of CSR strategies for investors**

| ACTION PLA N | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Target 4: By 2026 investments in systems of production and consumption based on sustainable eco-friendly practices increased | | | | | | | | | | | | | |
| Activities | Output | Timeframe | | | | | Budget("000") | | | | | Funding source | Responsible actor/s |
| | | 2022 | 2023 | 2024 | 2025 | 2026 | 2022 | 2023 | 2024 | 2025 | 2026 | | |
| *Preparation Stage:* | | | | | | | | | | | | | |
| Feasibility study to explore different opportunities for CSR improvement that will include establishing investors/government platform; areas for collaboration between key investors and the Government priorities for CSR investments; Community support mobilization; and Investment guidelines | Reports | X | | | | | 65,000 | | | | | Public, private, Donors & ODAs | MoF&P,, ZIPA, MoBE&F, DF-NR-MAINL, DoE-FVPO, DoT, CoT, LGA, Donors, BIOFIN Team, Consultants, TC, SC, UNDP & Int'l Technical Advisor |
| *Implementation:* | | | | | | | | | | | | | |
| Lobbying and raise awareness for investors, communities and the government | Lobbying strategy; and Reports | X | | | | | 49,000 | | | | | | |
| Develop a pipeline of good transparent biodiversity-focused projects to receive CSR | Reports/a Pipeline | x | x | | | | 30,000 | 30,000 | | | | | |
| Establish coordination modalities/mechanisms/arrangements | coordination arrangements Modalities, mechanisms, and | X | | | | | 28,000 | | | | | | |
| Support review of investment guidelines to address effective CSR | Reviewed guidelines and By-laws | X | | | | | 42,000 | | | | | | |
| Develop and implement M & E framework | Reports | X | X | X | X | X | 55,000 | 35,000 | 35,000 | 35,000 | 35,000 | | |
| TOTAL | | | | | | | **269,000** | **65,000** | **35,000** | **35,000** | **35,000** | | |

## 5 BIOFIN NATIONAL COORDINATION STRUCTURE FOR BFP IMPLEMENTATIONS

Implementation of the BFP in Zanzibar will largely rely on an effective coordination from the national level through the implementing MDAs and Non-state actors. The proposed structure for coordination of BIOFIN, in particular BFP implementations in Zanzibar aligns with and get embedded to the existing structure for coordinating matters related to Biodiversity and the Environment under the First Vice President Office (FVPO), (Figure 4). The overall coordination of BFP implementations will be vested at the Department of Environment (DoE) in the FVPO which will be owning the BFP. There shall be a BIOFIN National Coordinator in Zanzibar who will assist the FVPO in the overall coordination of the daily implementations and reporting on the BFP implementations to the Director of Environment and the National Steering Committee. The BIOFIN National Coordinator and the Director of Environment in the FVPO shall establish and maintain strong links with the different focal persons in the BFP implementing Ministries, specifically the MoBE&F, MoF&P and MAINRL as well as the related Departments, Agencies and Non-state actors. When the BIOFIN Programme ends, the coordination and monitoring of BFP implementations will continue to be vested at the DoE in the FVPO. The Director of Environment will be responsible to advise the government to assign the coordination and monitoring of BFP implementations to a qualifying staff using existing procedures.

The overall BIOFIN implementation will be guided by a National Steering Committee in Zanzibar that will serve as an advisory body to provide guidance on policy issues, strategies and related management aspects such as resources mobilization, plans and budgets and sectoral implementation progress. Members of the Steering Committee will be the Permanent Secretaries (PS) and heads of autonomous Departments and Agencies from the MoBE&F, MoF&P, MAINRL and other related Departments and Agencies. The Committee may co-opt other members including Non-State Actors on specific issues as deemed appropriate. The PS to the FVPO will be the chair and the BIOFIN National Coordinator in Zanzibar will serve as a Secretariat to the Steering Committee.

The Department of Environment, under the FVPO, has the overall mandate to oversee the conservation of Biodiversity in Zanzibar. According to the Zanzibar Environmental Management Act, 2015, the Director of Environment may,

- Issue guidelines and prescribe measure of conservation
- Specify Zanzibar Strategies, plans and programs for conservation and sustainable use of biodiversity
- Consider principle of conservation and sustainable utilization of biodiversity resources
- Identify, prepare and/or maintain an inventory of biodiversity
- Determine component of biodiversity which are rare or threatened with extinctions.

Key autonomous Departments and Agencies will be responsible in ensuring appropriate implementation of its respective Finance Solution(s) elaborated in this BFP and report to the Ministerial Focal Persons and/or to the National Coordinator. Below is a diagrammatic presentation of the proposed structure for BIOFIN national coordination, particularly BFP implementations (Figure 4). Responsibilities/Duties for each level of the coordination structure will be prepared to ensure effective implementation, M&E and reporting. It is expected that the proposed institutionalized co-ordination structure of BFP implementations in Zanzibar could ensure sustainability even after the BIOFIN programme in 2025.

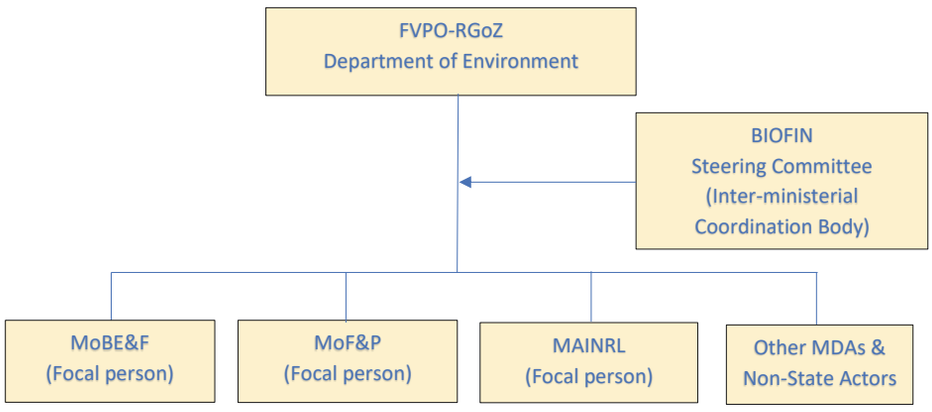


Figure 4: The BIOFIN National coordination structure for BFP implementations

# 6 CONCLUSION AND RECOMMENDATIONS

## 6.1 *Conclusion*

The BFP has been formulated through a rigorous methodological approach from the BER through FNA in accordance with the BIOFIN WorkBook of 2018. From the two BIOFIN components (BER and FNA), it was noted that the RGoZ experiences large financial gap in biodiversity conservation that is estimated to be TZS 89,718,836,000 (USD 38,839,323). However, it is anticipated that, if the prioritized 13 Finance Solutions are appropriately implemented would reduce or fill this gap for biodiversity conservation ultimately contributing to the Zanzibar Vision 2050, SDGs and the AICHI Biodiversity Targets. Interestingly, the prioritized FSs showed a very high synergistic potential since each would contribute to more than one biodiversity targets. The following are the prioritized FSs that have to be implemented:

i) Crowdfunding for Community Forest Management Areas (CoFMAs)

ii) Establish Payment for Ecosystem Services (PES) Programme for CoFMAs and other forests generating significant water ecosystem service

iii) Repurposing subsidies in the fisheries sector

iv) Establish and operationalize public-private partnership framework for “Re-greening Zanzibar Program” (coastal and inland areas) and coral reefs restorations

v) Repurposing subsidies for sustainable seaweed farming

vi) Secure Debt-for-nature swaps for sustainable BLUE economy (coral reefs restoration)

vii) Establish Blue Fund for BLUE Economy implementation

viii) Establish crowdfunding for restoration of degraded coastal and beach areas

ix) Identify and develop a new program for scaling up of REDD+ initiatives

x) Introduce subsidies for clean energy sources (gas and electricity) for household energy

xi) Increase Corporate social responsibility (CSR) contributions from the private sector for biodiversity conservation

xii) Reform tourist’s entrance fee structure for protected areas and adopt a Digital Voucher System for the fees collection

xiii) Review and strengthen the revenue retention framework/Scheme for the PAs (MCAs)

## 6.2 *Key recommendations*

To achieve the expected financial results from the prioritized FSs, the following have been recommended:

- The First Vice President Office-Department of Environment (FVPO-DoE); Ministry of Blue Economy and Fisheries (MoBEF); the Ministry of Agriculture, Irrigation, Natural Resources and Livestock (MAINRL), other MDAs and Non-state Actors need to strengthen their collaborations along the BIOFIN National coordination structure for BFP implementations.
- To embed the BIOFIN-related functions into existing biodiversity coordination framework under the FVPO and focal points/persons in the implementing MDAs and Non-state Actors.
- Preparation of Zanzibar Biodiversity Strategy and Action Plan (ZABSAP) would ensure the prioritized FSs are reflected in addressing the threats to biodiversity. The UNDP through its BIOFIN Global office would work with the RGoZ to mobilize the financial resources needed for the ZABSAP.
- The government support to incentivize private sector and in risks management during implementations.
- Capacity building to key implementers and coordination to ensure the continual implementations of already prioritized FSs before and after the BIOFIN programme ends. The capacity building has to enhance ability to establish and implement new FSs in the absence of the BIOFIN programme.
- If successfully implemented in Zanzibar the initiative could be scaled up to the mainland Tanzania.

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# Annexes

## Summary of the BIOFIN Process

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**Annex 2:** PIR Phase
**Annex 3:** BER, FNA and FSs Screening and Prioritization
**Annex 3.3 b:** Typewritten list of participants from to the private sector engagement workshop held at Serena Hotel on 8th December 2021
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**Summary of the BIOFIN Process**

**Annex 1: Inception phase**

The BIOFIN process followed the methodological steps described in the BIOFIN Workbook (2018) as indicated in Figure A1. The inception report was prepared and presented to provide the road-map of the whole process including; objectives of the initiative in Zanzibar; geographical scope (confined in Zanzibar as part of the United Republic of Tanzania); integrated approach to follow involving key relevant sectors and actors; technical steps to follow; acknowledged BIOFIN national structure to implement the project (Figure A1); and the annual workplan, that was later on challenged by COVID-19 pandemic.

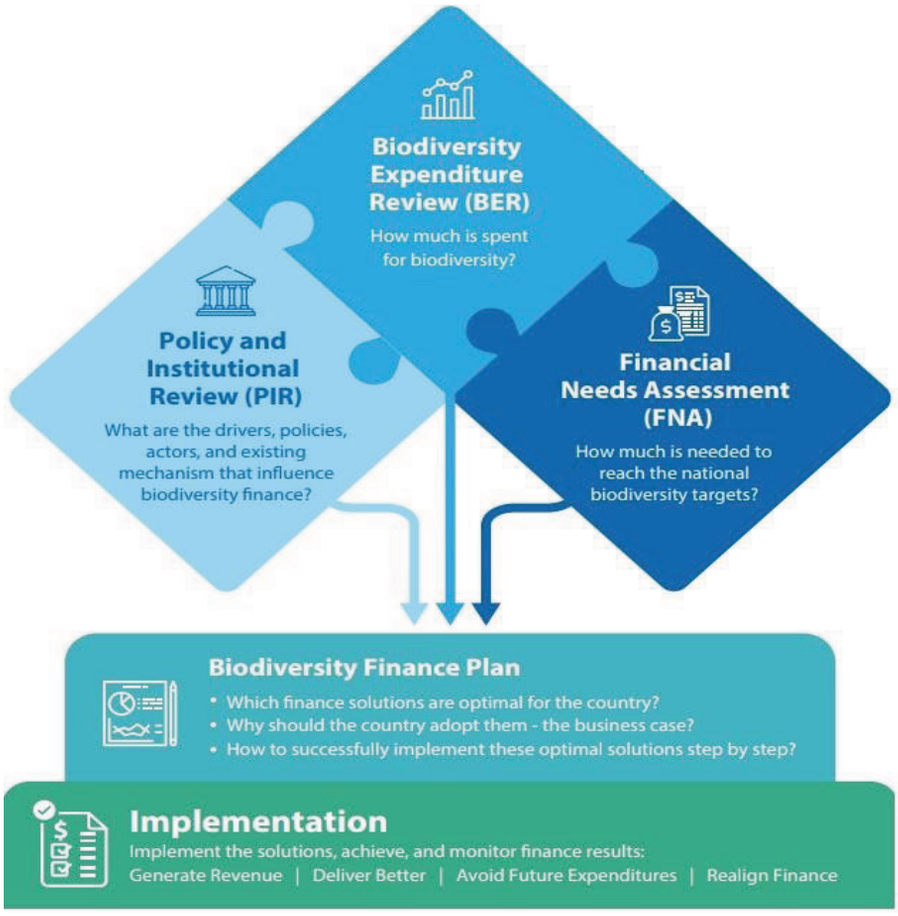



Figure A 1: Technical steps in BIOFIN Methodology

The kick-start involved close engagement with the BIOFIN team members at global and national levels. At national level, this included the UNDP Country Office Programme Specialist, BIOFIN focal person in the Department of Environment - First Vice President's Office (FVPO)– Zanzibar and the focal person in the President's office Finance and Planning. The inception phase was mainly limited to virtual meetings through Skype and Zoom as this took place due to COVID-19 pandemic restrictions.

The Global team provided regular updates to ensure full participation in the global networks including webinars, virtual meetings and Mass Open Online Course (MOOC) that generated lessons from other member countries. As such a comprehensive Inception Report was produced for all the BIOFIN components (PIR, BER, FNA and BFP) that was presented in a virtual launch workshop held in June 2020 to contextualize the methodology and build the national ownership (Figure A 2).

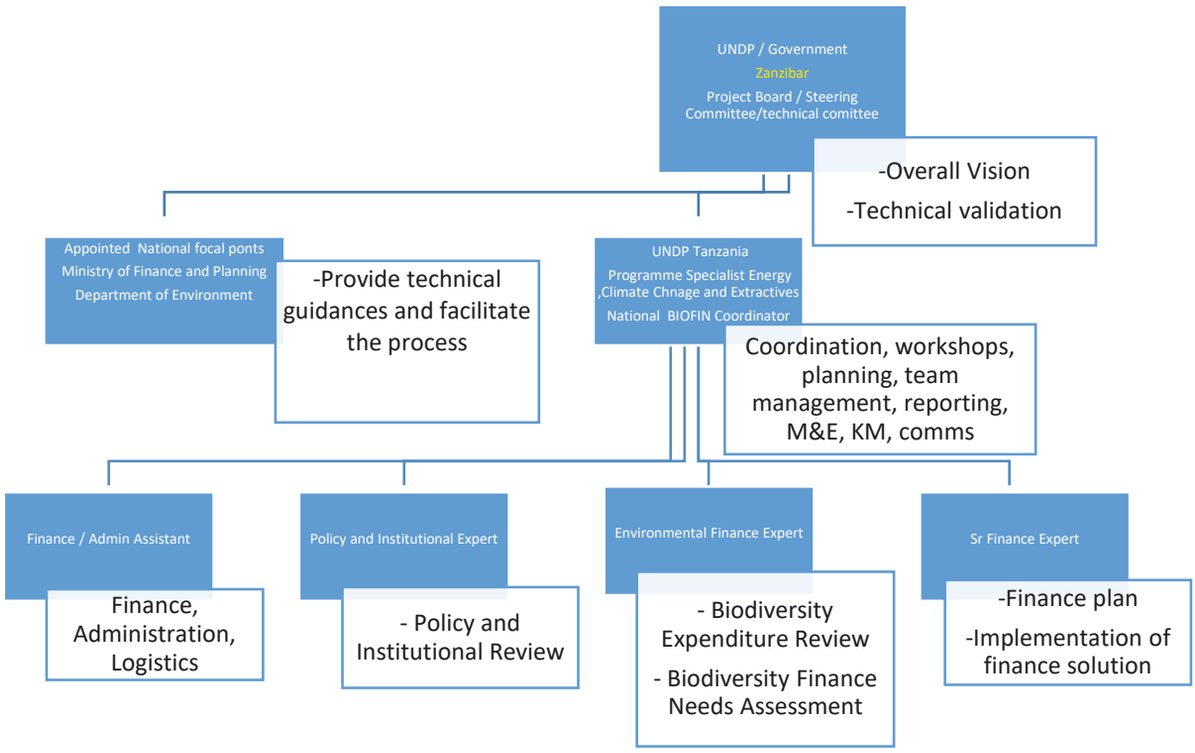



Figure A 2: The BIOFIN national structure for implementing the project methodological phase

## Annex 2: PIR Phase

The PIR process involved reviews of different relevant documents, stakeholders' consultations through meeting with key officials into their offices and stakeholders' workshops. Different data and information were collected (Table A1). The reviews on Policy and Institutions analyzed the policy and institutional context for biodiversity finance in Zanzibar. The process identified how biodiversity and ecosystem services support national development policies, contribution to SDGs and drivers of biodiversity change, actors and mechanisms for biodiversity finance. Relevant biodiversity-related policies and associated plans and strategies and institutions for addressing biodiversity finance solutions were reviewed.

**Table A 1:Key data and information collected from different sources for PIR component**

| Data/Information | Source (Depart/Sector) |
|---|---|
| 1. Economic contributions of Biodiversity to Zanzibar Economy: | |
| • Time series data (2014/2015 - 2019/2020): Biodiversity-linked Sectoral contributions to GDP: | PO-F&P |
| • Forest and mangroves | DFNR |
| • Tourism | DoT, Commission of Tourism |
| • Employment in sectors related to biodiversity: tourism, fisheries, forestry, marine | DoT, observation |
| • Marine resources | MCA, DoF |
| • Fisheries | DoF |
| • Processing industries (Fish, spices, seaweed products etc) | MoI |
| • Wetlands management etc | DoW/DoE |
| • Aquaculture including cage fishing | DoF |
| 2. Projects on biodiversity conservation<br>• List (sectors, NGOs, CBOs)<br>• Species under special conservation programmes (e.g. endangered species) | DFNR, DoT, MPAs, DoF, DoE, NGOs |
| 3. Tourism and associated businesses/enterprises (Hotels, Lodges, etc) | CoT and PO-F&P |
| 4. Botanical gardens and biodiversity/wildlife in captivity | DFNR, DoA, Private sector |
| 5. Positive trends (3-5 years) | |
| • Wetlands management etc | DoE |
| • Aquaculture including cage fishing | MoBE&F |
| • Restored habitats (land and forest hectares rehabilitated/restored) | DFNR/DoE |
| • Forest plantations | DFNR |
| • Organic farming (Certified agricultural lands for organic farming) - spices, Eco-labeling | DoA |
| • Payment for Ecosystem Services-PES (Certified areas under the PES initiative) – Presence and potential solution | MoWEM, DFNR |
| • Status of illegal activities (Forest products, marine resources, etc) | MPAs, DoF, DFNR |
| 6. Negative trends (3-5 years): | |
| • Habitats changes | DFNR, MPAs |
| • Endangered species | DFNR, MPAs |
| • Invasive alien species | DFNR, MPAs, DoA |
| • Pollutions including agrochemicals | DFNR, MPAs, DoA, DoE, NGOs |
| • Over-harvesting of wildlife and wild plants for commercial and local consumption | MPA, DFNR |
| 7. Inter-sectoral gaps regarding roles including financing for biodiversity conservation | Documents reviews |
| 8. Climate change and biodiversity conservation | |
| • Zanzibar Climate Change Strategy (2014-2020) | DoE |

| | |
|---|---|
| • National Climate Change Finance Mechanism | DoE |
| 9. Land policy in Zanzibar | MoL&HD |
| 10. Ring-fenced funds for conservation?? And potential retention solutions | |
| • Ring-fenced charges and taxes for re-investment basedon respective laws i.e. Environmental law, Tourism Act | MPAs, DFNR, PO-F&P |
| • Specific biodiversity standard budget (or cost) units and Account codes | PO-F&P |
| 11. Current financial instruments<br>• Economic incentives – taxes and expenditures<br>• Policies, laws, and practices<br>• National reports<br>• Market, fiscal, grant, debt/equity<br>• Risks | PO-F&P |
| • Employment in tourism about …. people | DoT, CoT |
| • Entrance fees charges in PAs and MPAs<br>• Water resources user fees charged | Documents reviews |
| 12. Existing Finance solutions: | |
| • Debt-for-nature swaps | PO-F&P an DFNR |
| • Environmental penalties and proceeds for mitigation and operations of the institution | DoE, DFNR, DoF |
| • Biodiversity conservation related projects in Zanzibar<br>• Biodiversity related initiatives supported through the CSR<br>• Eco-labels applicable in Zanzibar | PO-F&P, DoF, DFNR, MPAs, DoT, |
| 13. Institutions with direct mandates and functions on biodiversity conservation and utilization | DFNR, MPAs, DoA, DoE |
| 14. Key capacity areas for effectiveness and ability to design and scale out biodiversity finance solutions | DFNR, MPAs, DoA, DoE |
| 15. Guidelines for the Preparation of Annual Plan and Budget in the Implementation of the Five-Year Development Plan (2015/16-2020/21) | PO-F&P |

For stakeholders' consultations, the plan was developed jointly with the UNDP CO, BIOFIN focal person in the Department of Environment (DoE) in the First Vice President's Office (FVPO) and the President's Office Finance and Planning. The consultations with key stakeholders were carried out to generate primary data and validate secondary data documented in the key documents reviewed. Due to COVID-19 restrictions in the initial stages of the review, physical meetings and consultations were complemented largely with virtual meetings and communications through Skype, Zoom, emails and telephone calls with relevant Ministries, Departments and Agencies with support from the Focal Points and the Technical Team members. The subsequent physical consultations were then arranged and coordinated jointly between BIOFIN consultants using a data collection checklist/tool.

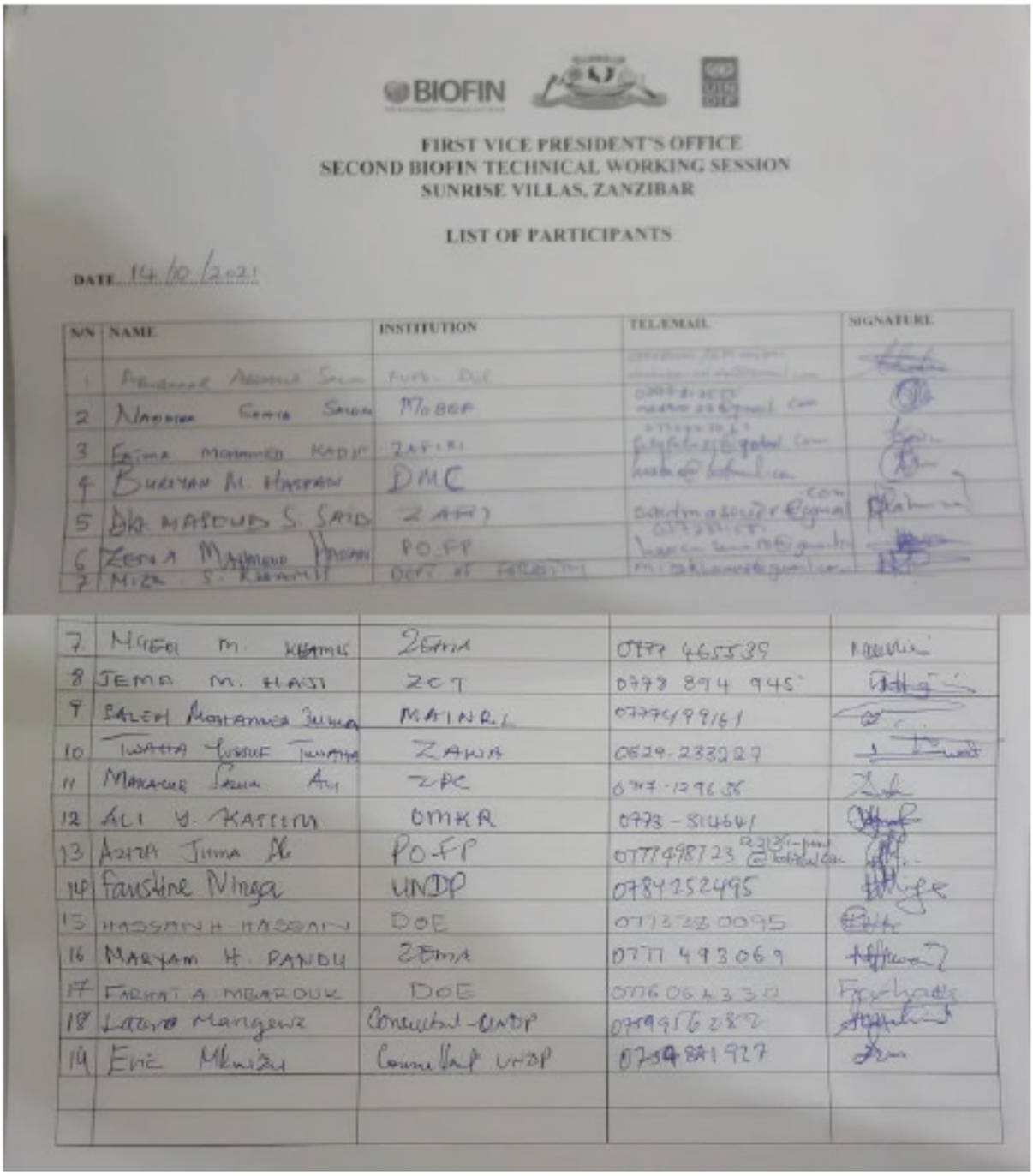
For stakeholders' workshops, the BIOFIN methodology was expected to involve a series of stakeholders' workshops, meetings and consultations. However, the envisioned consultative workshop by the national BIOFIN team and stakeholders was not conducted due to the COVID-19 travel and meetings restrictions. The discussions took place through virtual Zoom meeting at the end of June 2020 bringing together the Global Team, UNDP CO, UNDP Zanzibar sub-office, Zanzibar Technical Team and consultants. This workshop provided a platform for practical cooperation and 'buy-in' from decision makers in the key ministries and departments. On completion of the draft report, the first stakeholders' consultation workshop was planned for review and input to the draft report. A stakeholders validation workshop was held in Zanzibar on 13th April 2021 for technical clearance of final report.

## Annex 3: BER, FNA and FSs Screening and Prioritization

Table A 3. 1: Participants to the first stakeholders' workshop for BER, FNA and FSs held on 8th – 13th September, 2021 at Sunrise Villa, Jambian, Zanzibar

| | Name | Institution | Contact |
|---|---|---|---|
| 1. | Abubakar Abdalla Salum | Division of Environment | 0772806011 abubakarsal04@gmail.com |
| 2. | Nadhira Shaib Salum | Ministry of Blue Economy & Fisheries | 0777817555 nadhra22@gmail.com |
| 3. | Zena Mahmoud Hassan | President's Office -Finance and Planning | 0772371581 hassanzena50@gmail.com |
| 4. | Maryam Hussein Pandu | Zanzibar Environment Management Authority | 0777493069 maryampandu@yahoo.com |
| 5. | Twaha Yusuf Twaha | Zanzibar Water Authority | 0629233227 binyassuf2012@gmail.com |
| 6. | Saleh Mohamed Juma | Ministry of Agric. Natural Resources and Livestock | 0777499161 |
| 7. | Miza Suleiman Hamisi | Department of Forestry & Non-Renewable Natural Resources | 0777332223 mizakhamis@gmail.com |
| 8. | Hassan H. Hassan | Department of Environment | 0773380095 hassanol1000@gmail.com |
| 9. | Buriyan M. Hassan | DMC | 0772752383 |
| 10. | Makame Salum Ali | Zanzibar Planning Commission | 0717129636 |
| 11. | Mgeni M. Khamis | Zanzibar Environment Management Authority | 0777465539 mgeni2020@yahoo.com |
| 12. | Ali Y. Kassim | OMKR | 0773514664 ahnaf6263@gmail.com |
| 13. | Aziza Juma | President's Office -Finance and Planning | 0777498723 |

**Table A3.2 a: Scanned list of Participants to the technical workshop for BER, FNA and FS held at Sunrise Villa, Jambian (11th - 14th October, 2021)**



BIOFIN

FIRST VICE PRESIDENT'S OFFICE
SECOND BIOFIN TECHNICAL WORKING SESSION
SUNRISE VILLAS, ZANZIBAR

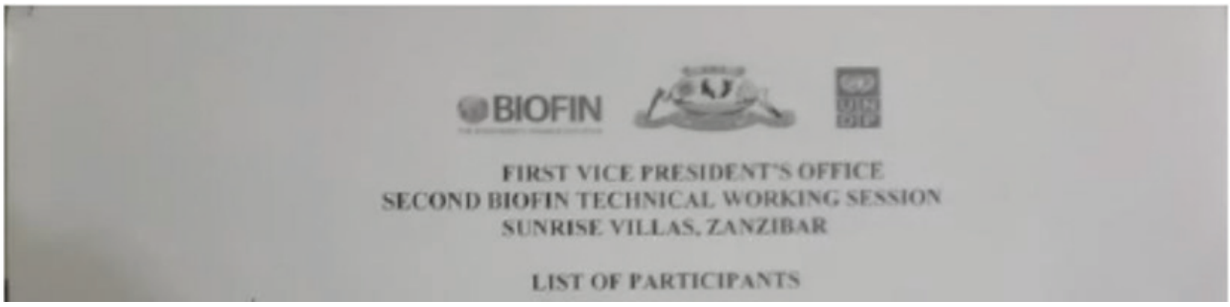
LIST OF PARTICIPANTS

DATE 14/10/2021

| S/N | NAME | INSTITUTION | TEL/EMAIL | SIGNATURE |
|---|---|---|---|---|
| 1 | [illegible] | [illegible] | [illegible] | |
| 2 | Nadhra Said | MoBEP | [illegible] | |
| 3 | Fatma Mohamed Kadir | ZAFIRI | [illegible] | |
| 4 | Bukheyan M. Hassan | DMC | [illegible] | |
| 5 | Dr. Masoud S. Said | ZAFF | [illegible] | |
| 6 | Zeina [illegible] | PO-FP | [illegible] | |
| 7 | Mize S. Khamis | DEPT OF FORESTRY | [illegible] | |
| 7 | Mgeni M. Khamis | ZBMA | 0777 465539 | |
| 8 | Jema M. Haji | ZCT | 0778 894 945 | |
| 9 | Salem Mohamed Juma | MAINRL | 0777499161 | |
| 10 | Iwatta Yussuf Iwatta | ZAWA | 0629-233227 | |
| 11 | Makame Juma Ali | ZPC | 677-129635 | |
| 12 | Ali Y. Kassim | OMKR | 0773 - 514641 | |
| 13 | Azza Juma M. | PO-FP | 0777498723 | |
| 14 | Faustine Ninga | UNDP | 0784252495 | |
| 15 | Hassanh Hassani | DOE | 0773280095 | |
| 16 | Maryam H. Pandu | ZBMA | 0777 493069 | |
| 17 | Farhat A. Mbarouk | DOE | 0776064330 | |
| 18 | Lazaro Mangewa | Consultant-UNDP | 0789516289 | |
| 19 | Eric Mkuzu | Consultant UNDP | 0754881927 | |

*Note: The typed list for clarity is presented below*

**Table A3.2 b: Typewritten list of participants to the technical workshop for BER, FNA and FSs held at Sunrise Villa, Jambian (11th - 14th October, 2021)**




DATE: 11th - 14th October, 2021

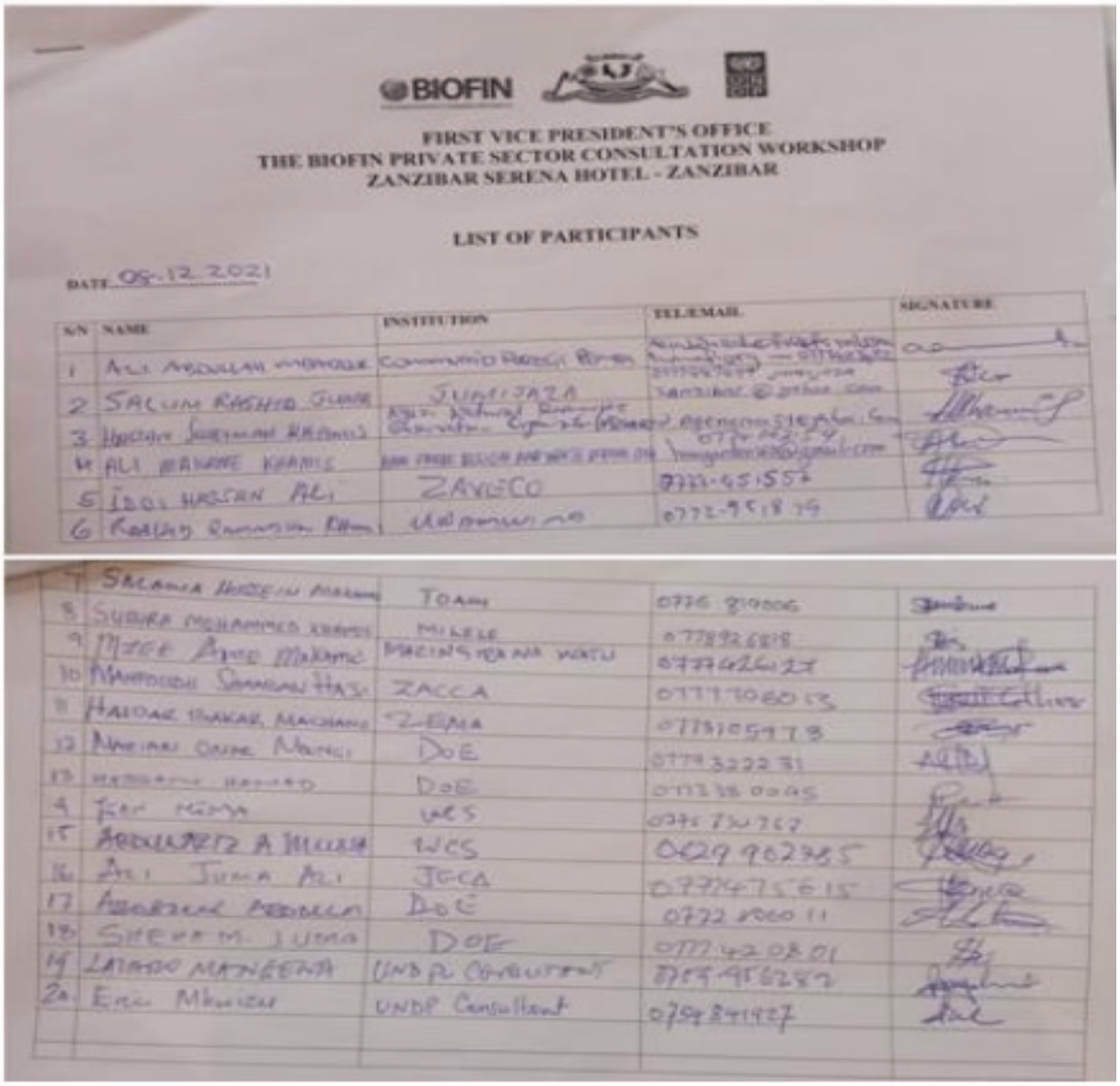
| S# | Participant | Institution | Contact |
|---|---|---|---|
| 1 | Abubakar Abdalla Salum | Department of Environment (DoE) | 0772806811 |
| 2 | Nadhira Shaib Salum | Ministry of Blue Economy and Fisheries (MoBE&F) | 0777817555 |
| 3 | Fatma Mohamed Kadin | Zanzibar Fisheries Research Institute (ZAFIRI) | - |
| 4 | Buriyan M. Said | DMC | |
| 5 | Dk. Masoud S. Said | Zanzibar Agricultural Research Institute (ZARI) | |
| 6 | Mgeni M. Khamis | Zanzibar Environmental Management Authority (ZEMA) | 0777465539 |
| 7 | Jema M. Haji | ZCT | 0778894945 |
| 8 | Zena Mahmoud Hassan | President's Office-Finance & Planning (PoF&P) | 0772371581 |
| 9 | Maryam Hussein Pandu | ZEMA | 0777493069 |
| 10 | Salem Mohamed Juma | Ministry of Agriculture Irrigation Natural Resources and Livestock (MAINRL) | 0777499161 |
| 11 | Twaha Yussuf Twaha | Zanzibar Water Authority (ZAWA) | 0629233227 |
| 12 | Makame Salum Ali | ZPC | 0717129636 |
| 13 | Ali Y. Kassim | OMKR | 0773314641 |
| 14 | Aziza Juma Ali | PoF&P | 0777493069 |
| 15 | Hassan H. Hassan | DoE | 0773380095 |
| 16 | Faustine Ninga | UNDP | 0784252495 |
| 17 | Farhata Mbarouk | DoE | 0776064330 |
| 18 | Lazaro Mangewa | Consultant UNDP | 0759956282 |
| 19 | Eric Mkwizu | Consultant UNDP | 0754871927 |

**Table A3.3: Public and private sectors and CSOs participated to the private sector engagement workshop held at Serena Hotel on 8th December 2021**

| S/N | ORGANISATION/COMPANY | CATEGORY |
|---|---|---|
| 1 | Community Forest Pemba | Pemba/Forest (COFMAs) |
| 2 | JUMIJAZA | COFMAS – Unguja Island |
| 3 | Ngezi Natural Resources Conservation Organization (NGENARECO) -Pemba | COFMAs-Pemba Island |
| 4 | Ham Garden Design and Wastes Disposal cog | Wastes Recycling |
| 5. | ZACCA | Environment |
| 6. | ZAVECCO | Environment |
| 7. | WCS | NGO (Internantional)-Conservation |
| 8. | WCS | NGO (Internantional)-Conservation |
| 9 | JECA | COFMAs, Unguja Island |
| 10 | UWAMWIMA | Organic Farming |
| 11 | Mazingira na Watu | Coral Cleaning |
| 12. | TOAM | Organic Farming |
| 13. | MILELE | NGO |
| 14. | DoE | Environment |
| 15. | ZEMA | Environment |
| 16. | DoE | Environment |
| 17 | Umoja ni Nguvu | Organic Farming |
| 18 | Tushayazoea | Organic Farming |
| 19 | DoE | Environment |
| 20 | DoE | Environment |

*Note: The government representatives were from the Department of Environment and Zanzibar Environmental Management Authority*

**Table A3.3 a: Scanned list of participants to the private sector engagement workshop held at Serena Hotel on 8th December 2021**



BIOFIN

FIRST VICE PRESIDENT'S OFFICE
THE BIOFIN PRIVATE SECTOR CONSULTATION WORKSHOP
ZANZIBAR SERENA HOTEL - ZANZIBAR

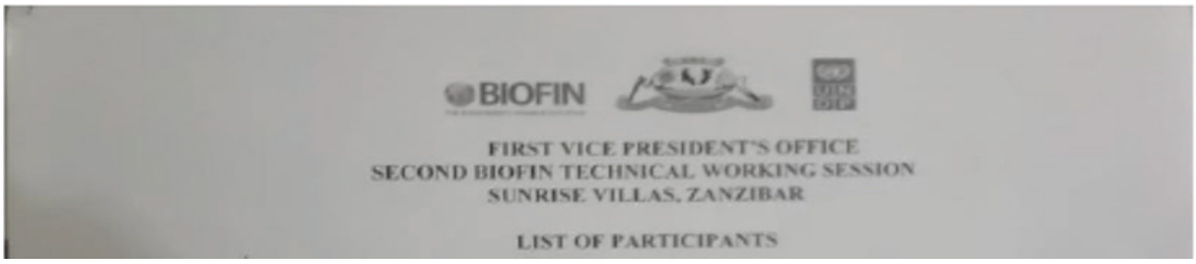
LIST OF PARTICIPANTS

DATE 06.12.2021

| SN | NAME | INSTITUTION | TEL/EMAIL | SIGNATURE |
|---|---|---|---|---|
| 1 | ALI ABDULLAH MOHAMED | [illegible] | [illegible] | |
| 2 | SALUM RASHID JUMA | JUMIJATA | [illegible] | |
| 3 | HASSAN SULEIMAN KHAMIS | [illegible] | 0774 22 [illegible] | |
| 4 | ALI MAHMOUD KHAMIS | [illegible] | [illegible] | |
| 5 | IDDI HASSAN ALI | ZAWECO | 0773-65155 | |
| 6 | KHALFAN [illegible] | [illegible] | 0772-95184 | |
| 7 | SALAMA HUSSEIN [illegible] | TOAM | 0776 810006 | |
| 8 | SUBURA MOHAMMED KHAMIS | MILELE | 0778926818 | |
| 9 | MSEE ABDU MAKAME | MACING'EA NA WATU | 0774626127 | |
| 10 | MAHFOUDH SHAMSAN HASS | ZACCA | 0777706015 | |
| 11 | HALOAK MAKAR MACHAMO | ZEMA | 0778105978 | |
| 12 | MAHMUD OMAR MAHMUD | DOE | 0774322231 | |
| 13 | [illegible] | DOE | 0778380045 | |
| 14 | [illegible] | WCS | 0776 [illegible] | |
| 15 | ABDULHAFIZ A MUSSA | WCS | 0629 902385 | |
| 16 | ALI JUMA ALI | JECA | 0774751615 | |
| 17 | [illegible] | DOE | 0772 [illegible] | |
| 18 | SIHABA M. JUMA | DOE | 0777 42 08 01 | |
| 19 | LAZARO MANGENA | UNDP CONSULTANT | 0754 956287 | |
| 20 | ERIC MBWILLA | UNDP Consultant | 0754 841927 | |

*Note: The typed list for clarity is presented below*

**Annex 3.3 b: Typewritten list of participants from to the private sector engagement workshop held at Serena Hotel on 8th December 2021**




DATE: 8th December, 2021

| S# | Participant | Institution | Contact |
|---|---|---|---|
| 1 | Ali Abdallah Mbarouk | Community Forest Pemba | |
| 2 | Salum Rashid Juma | JUMIJAZA | |
| 3 | Hassan Suleman Khamis | Ngezi Natural Resources Conservation | |
| 4 | Ali Makame Khamis | Ham Garden Designer and Wastes Disposal | Mwanakwerekwe, Stone Town Zanzibar. |
| 5 | Iddi Hassan Ali | ZAVECO | 0777451552 |
| 6 | Rashid Ramadhan Khamis | UWAMWIMA | 0772951839 |
| 7 | Salama Hussein Makame | TOAM | 0776819006 |
| 8 | Surura Mohamed Khamis | MILELE | 0778926878 |
| 9 | Mzee Ame Makame | MAZINGIRA NA WATU | 0777426127 |
| 10 | Manfaudh Shaban Haji | ZACCA | 0777706013 |
| 11 | Haidar Bakar Machina | ZEMA | 0773705773 |
| 12 | Marium O. Mangi | DoE | 0777322231 |
| 13 | Ramadhan Hamad | DoE | 0773180045 |
| 14 | Abdulaaziz A. Mussa | WCS | 0629907765 |
| 15 | Ali Juma Ali | JECA | 0777475615 |
| 16 | Azakhal Abdalla | DoE | 0772806011 |
| 17 | Sheha M. Juma | DoE | 0777420801 |

*Note: The government representatives were from the Department of Environment (DoE) and Zanzibar Environmental Management Authority (ZEMA)*

All these consultative sessions were followed by a BFP write up process receiving various inputs and comments from the BIOFIN Team and internantional Technical Advisors (Hereve Barois and Pierre Lafranco) through a a series of Zoom meetings and e-mails.

## Annex 4: Summary of the identification, screening and prioritization of Finance Solutions (FSs)

Below are the step-wise outputs of the identification and prioritization (rapid and detailed screening sub-steps) methodological processes for the biodiversity Finance Solutions that form the core part of this Biodiversity Finance Plan.

### *Step 1: Preliminary list of FSs*

**Table A4.1: List of Biodiversity Finance Solutions generated during the preliminary step**

| S# | Finance Solutions | *Result-based Category (I, II, III & IV) |
|---|---|---|
| 1 | Re-investment of portions of revenues generated from biodiversity to conservation | I, III&IV |
| 2 | Remove harmful subsidies | II&IV |
| 3 | Provide subsidies for clean energy sources (gas and electricity) for household energy | I, II & IV |
| 4 | Provide subsidies for sustainable fishing gear (nets, boats for deep sea, etc) | I, II & IV |
| 5 | Subsidize organic farming of key crops (clove, nutmeg, cardamom, turmeric, cinnamon, chili, and black pepper) | I, II & IV |
| 6 | Subsidize sustainable seaweeds farming | I, II & IV |
| 7 | Subsidize for tree seedlings and planting | II & III |
| 8 | Establish crowdfunding for endangered species (to be selected): Ader's Duiker (*Cephalophus adersi*), Pemba Flying fox (*Pteropus voelzkowi*), Zanzibar red colobus (*Piliocolobus kirkii*), and Blue duiker (*Cephalophus monticola sundevalli*) | I |
| 9 | Establish crowdfunding for Mangrove's restoration and protection | I |
| 10 | Establish crowdfunding for terrestrial forestry restorations (selected strategic areas, e.g. corridors, buffer zones, | I |
| 11 | Establish crowdfunding for restoration of degraded coastal and beach areas: Forestry/Habitats (selected strategic areas) | I |
| 12 | For Community Forest Management Areas (CoFMAs) | I |
| 13 | Secure Debt-for-nature swaps for BLUE economy implementation | I&IV |
| 14 | Secure debt-for-nature swaps for mangroves restoration and protection capacity | I&IV |
| 15 | Secure debt-for-nature swaps for Coastal and terrestrial forestry | I&IV |
| 16 | Secure debt-for-nature swaps for Coral reefs restoration | I&IV |
| 17 | Establish PES Programme for community-based forests (CoFMAs) | I&II |
| 18 | Establish PES Programme for qualifying private Forests | I&II |
| 19 | Establish PES Programme for Watershed Services | I&II |
| 20 | Establish PES Programme for pollinators forest patches | I&II |
| 21 | Establish PES Programme for pollinators in Zanzibar Agricultural Research Institute (ZARI) Farms | I, II&III |
| 22 | Establish Green/Sustainability Revolving Funds for energy efficiency alternatives/technologies | I&III |
| 23 | Establish Green/Sustainability Revolving Funds in sustainable fisheries | I&III |
| 24 | Establish Green/Sustainability Revolving Funds for community-based ecotourism in CoFMAs | I&III |
| 25 | Establish Green/Sustainability Revolving Funds for community-based mariculture | I&III |
| 26 | Establish Green/Sustainability Revolving Funds for coastal community-based Seaweed farming | I&III |
| 27 | Establish BLUE Economy Trust funds | I&III |
| 28 | Establish Zanzibar Environmental Trust funds | I&III |
| 29 | Re-investment of fees and charges from tourism for beach and coastal management | I, III & IV |
| 30 | Review for appropriate penalties and other compensation for unplanned environmental damage | I&II |
| 31 | Royalties in deep sea fisheries | I |
| 32 | Enforce environmental and biodiversity offsets | II |
| 33 | Bioprospecting | I |

| S# | Finance Solutions | *Result-based Category (I, II, III & IV) |
|---|---|---|
| 34 | Re-distribution of sand-mining fees for habitats restoration | III&IV |
| 35 | Biosafety fee | II |
| 36 | Sustainable bio-Trade finance | I&III |
| 37 | Corporate social responsibility (CSR) | I |
| 38 | Investment incentives to biodiversity/environmental responsible investors | II |
| 39 | Promote Impact investments | I |
| 40 | Promote Carbon markets | I&II |
| 41 | Clean Development Mechanism (CDM) | I&II |
| 42 | Establish a programme for scaling up of REDD+ initiatives | I, II&III |
| 43 | Strengthen Eco-labels, organic labels and fair trade (bio-trade) | II |
| 44 | Ring-fenced finances in foreign currency exchange related to tourism, and biodiversity-related projects | III |
| 45 | Re-investment of portion of revenues from commercial fishing to conservation | III |
| 46 | Re-investment of portions of revenues generated from penalties/charges on offences related to illegal off-take of biodiversity resources (illegal logging, fishing and wildlife trade) | I&III |
| 47 | Ecological fiscal transfer for CoFMAs and mangroves | I&IV |

** **Categories/Types of the FSs:** I) generate additional revenue, II) avoid future biodiversity expenditure, III) ensures better spending of the financial resources, and IV) realigns current biodiversity expenditures*

***Step 2: Prioritization of FSs***

This step involved rapid and detailed screening sub-steps to obtain the most prioritized FSs.

***Step 2.1. Rapid screening***

**Table A4.2: Scores and recommended FSs to the detailed screening stage**

| S# | Finance solution | Sum of Rapid Feasibility Scores (X/12) | Screening at 9 Points Cut-off? (Yes/No) |
|---|---|---|---|
| 1 | Remove harmful subsidies | 11 | Yes |
| 2 | Establish Blue Economy Fund | 10 | Yes |
| 3 | Re-investment of fees and charges from tourism for beach and coastal management | 10 | Yes |
| 4 | Provide subsidies for clean energy sources (gas and electricity) for household energy | 10 | Yes |
| 5 | Investment incentives to biodiversity/environmental responsible investors | 10 | Yes |
| 6 | Establish crowdfunding for Mangrove restoration and protection | 10 | Yes |
| 7 | Review for appropriate penalties and other compensation for unplanned environmental damage | 10 | Yes |
| 8 | Royalties in deep sea fisheries | 10 | Yes |
| 9 | Corporate social responsibility (CSR) | 10 | Yes |
| 10 | Re-investment of portions of revenues generated from biodiversity to conservation | 10 | Yes |
| 11 | Secure Debt-for-nature swaps for BLUE economy implementation | 10 | Yes |
| 12 | Establish Green/Sustainability Revolving Funds for coastal community-based Seaweed farming | 10 | Yes |
| 13 | Re-investment of portion revenues from commercial fishing to conservation | 10 | Yes |
| 14 | Subsidize sustainable seaweed farming | 10 | Yes |

| S# | Finance solution | Sum of Rapid Feasibility Scores (X/12) | Screening at 9 Points Cut-off? (Yes/No) |
|---|---|---|---|
| 15 | Provide subsidies for sustainable fishing gears (nets, boats for deep sea, etc) | 10 | Yes |
| 16 | Subsidize organic farming of key crops (clove, nutmeg, cardamom, turmeric, cinnamon, chill, and black pepper) | 10 | Yes |
| 17 | Secure debt-for-nature swaps for Coastal and terrestrial forestry | 10 | Yes |
| 18 | Re-investment of portions of revenues generated from penalties/charges for offences related to illegal off-take of biodiversity resources (illegal logging, fishing and wildlife trade) | 9 | Yes |
| 19 | Secure debt-for-nature swaps for Coral reefs restoration | 9 | Yes |
| 20 | Establish crowdfunding for terrestrial forestry restorations (selected strategic areas, e.g. corridors, buffer zones, etc) | 9 | Yes |
| 21 | Establish PES Programme for community-based forests (CoFMAs) | 9 | Yes |
| 22 | Promote Impact investments | 9 | Yes |
| 23 | Promote Carbon markets | 9 | Yes |
| 24 | Establish Green/Sustainability Revolving Funds for community-based ecotourism in CoFMAs | 9 | Yes |
| 25 | For Community Forest Management Areas (CoFMAs) | 9 | Yes |
| 26 | Establish PES Programme for qualifying private Forests | 9 | Yes |
| 27 | Establish a programme for scaling up of REDD+ initiatives | 9 | Yes |
| 28 | Establish crowdfunding for restoration of degraded coastal and beach areas: Forestry/Habitats (selected strategic areas) | 9 | Yes |
| 29 | Establish Green/Sustainability Revolving Funds in sustainable fisheries | 9 | Yes |
| 30 | Enforce environmental offsets | 9 | Yes |
| 31 | Biosafety fee | 9 | Yes |
| 32 | Sustainable Bio-Trade finance | 9 | Yes |
| 33 | Establish crowdfunding for endangered species (to be selected): Ader's Duiker (*Cephalophus adersi*), Pemba Flying fox (*Pteropus voelzkowi*), Zanzibar red colobus (*Piliocolobus kirkii*), and Blue duiker (*Cephalophus monticola sundevalli*) | 9 | Yes |
| 34 | Secure debt-for-nature swaps for mangroves restoration and protection capacity | 9 | Yes |
| 35 | Re-distribution of sand-mining fees for habitats restoration | 9 | Yes |
| 36 | Ecological fiscal transfer | 9 | Yes |
| 37 | Establish Zanzibar Environmental Trust funds | 8 | No |
| 38 | Establish PES Programme for pollinators forest patches | 8 | No |
| 39 | Establish Green/Sustainability Revolving Funds for energy efficiency alternatives/technologies | 8 | No |
| 40 | Bioprospecting | 8 | No |
| 41 | Establish PES Programme for Watershed Services | 8 | No |
| 41 | Establish PES Programme for pollinators in Zanzibar Agricultural Research Institute (ZARI) Farms | 8 | No |
| 43 | Establish Green/Sustainability Revolving Funds for community-based mariculture | 8 | No |
| 44 | Strengthen Eco-labels, organic labels and fair trade (Bio-Trade) | 8 | No |
| 45 | Ring-fenced finances in foreign currency exchange related to tourism, and biodiversity-related projects | 8 | No |
| 46 | Tree seedlings and planting | 8 | Yes |
| 47 | Clean Development Mechanism (CDM) | 7 | No |

### *Step 2.2 Detailed screening step*

**Table A4.3: Scores of the screened and prioritized finance solutions ( 1- 15)**

| Scoring S# | Finance Solutions | Total Score | Average (X/80) | Selected (15) |
|---|---|---|---|---|
| 1 | Crowdfunding for Community Forest Management Areas (CoFMAs) | 665 | 55 | Yes |
| 2 | Establish PES Programme for community-based forests (CoFMAs) | 653 | 54 | Yes |
| 3 | Re-investment of portions of revenues generated from biodiversity to conservation | 645 | 54 | Yes |
| 4 | Provide subsidies for sustainable fishing gears (nets, boats for deep sea) | 634 | 53 | Yes |
| 5 | Tree seedlings and planting | 633 | 53 | Yes |
| 6 | Royalties in deep sea fisheries | 630 | 53 | Yes |
| 7 | Subsidize sustainable seaweed farming | 628 | 52 | Yes |
| 8 | Secure Debt-for-nature swaps for BLUE economy implementation* | 626 | 52 | Yes |
| 9 | Re-investment of fees and charges from tourism for beach and coastal management | 625 | 52 | Yes |
| 10 | Establish Blue Economy Fund | 607 | 51 | Yes |
| 11 | Review for appropriate penalties and other compensation for unplanned environmental damage | 606 | 51 | Yes |
| 12 | Establish crowdfunding for restoration of degraded coastal and beach areas: Forestry/Habitats (selected strategic areas) | 597 | 50 | Yes |
| 13 | Establish a program for scaling up of REDD+ initiatives | 591 | 49 | Yes |
| 14 | Provide subsidies for clean energy sources (gas and electricity) for household energy | 587 | 49 | Yes |
| 15 | Corporate social responsibility (CSR) | 586 | 49 | Yes |
| 16 | Secure debt-for-nature swaps for Coral reefs restoration** | 583 | 49 | Yes |
| 17 | Secure debt-for-nature swaps for mangroves restoration and protection capacity | 578 | 48 | No |
| 18 | Re-investment of portions of revenues generated from penalties/charges for offences related to illegal off-take of biodiversity resources (illegal logging, fishing and wildlife trade) | 577 | 48 | No |
| 19 | Re-investment of portion revenues from commercial fishing to conservation | 573 | 48 | No |
| 20 | Re-distribution of sand-mining fees for habitats restoration | 566 | 47 | No |
| 21 | Establish Green/Sustainability Revolving Funds in sustainable fisheries | 561 | 47 | No |
| 22 | Promote Carbon markets | 553 | 46 | No |
| 23 | Subsidize organic farming of key crops (clove, nutmeg, cardamom, turmeric, cinnamon, chili, and black pepper) | 552 | 46 | No |
| 24 | Establish Green/Sustainability Revolving Funds for community-based ecotourism in CoFMAs | 550 | 46 | No |
| 25 | Establish Green/Sustainability Revolving Funds for coastal community-based Seaweed farming | 550 | 46 | No |
| 26 | Establish crowdfunding for Mangrove restoration and protection | 549 | 46 | No |
| 27 | Establish crowdfunding for endangered species (to be selected): Ader's Duiker (*Cephalophus adersi*), Pemba Flying fox (*Pteropus voelzkowi*), Zanzibar red colobus (*Piliocolobus kirkii*), and Blue duiker (*Cephalophus monticola sundevalli*) | 546 | 46 | No |
| 28 | Enforce environmental offsets | 534 | 45 | No |
| 29 | Incentives to biodiversity/environmental responsible investors | 530 | 44 | No |
| 30 | Establish crowdfunding for terrestrial forestry restorations (selected strategic areas, e.g. corridors, buffer zones, etc) | 529 | 44 | No |
| 31 | Biosafety fee | 521 | 43 | No |
| 32 | Ecological fiscal-transfer | 520 | 43 | No |
| 33 | Promote Impact investments | 518 | 43 | No |
| 34 | Remove harmful subsidies | 489 | 41 | No |
| 35 | Sustainable Bio-trade finance | 472 | 39 | No |
| 36 | Establish PES Programme for qualifying private Forests | 436 | 36 | No |

***Note**: *&**These finance solutions were combined, remaining with 13 prioritized Finance solutions (1 – 15).*

***Step 2.3 Stakeholders consultations***

The list of representative stakeholders from the public and private sectors who participated in the consultations and engagement workshops are presented above in Annexes 3. Further scrutiny of the 15 prioritized FSs for clarity and appropriate naming based on various inputs provided by BIOFIN Technical advisors, and BIOFIN Team members during Zoom meetings, through emails and physical consultations generated the final list of 13 most prioritized FSs for implementations (Box A4).

**Box A4: Final List of prioritized 13 Finance Solutions in a serial order**

1. Crowdfunding for Community Forest Management Areas (CoFMAs)
2. Establish Payment for Ecosystem Services (PES) Programme for CoFMAs
3. Repurposively "Bluing" subsidies in the fisheries sector
4. Establish and operationalize public-private partnership framework for

4.1 "Re-greening Zanzibar Program" (coastal and inland areas) and coral reefs restorations

5. Repurposing subsidies for sustainable seaweed farming
6. Secure Debt-for-nature swaps for sustainable BLUE economy (coral reefs restoration)
7. Establish Blue Fund for BLUE Economy implementation
8. Establish crowdfunding for restoration of degraded coastal and beach areas
9. Identify and develop a new program for scaling up of REDD+ initiatives
10. Introduce subsidies for clean energy sources (gas and electricity) for household energy
11. Increase Corporate social responsibility (CSR) contributions from the private sector for biodiversity conservation
12. Reform tourist's entrance fee structure for protected areas and adopt a Digital Voucher System for the fees collection
13. Review and strengthen the revenue retention framework/Scheme for the PAs (MCAs).

***Step 3: Linking prioritized FSs with biodiversity targets***

The 13FSs were linked with biodiversity targets based on their potential contributions towards achieving one or more biodiversity targets, and hence strategic objectives in biodiversity conservation (Table A4.4).

**Table A4.4: Linkage and contributions of FSs to different biodiversity targets**

| | Biodiversity Targets attributed to each FS | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **FSs*** | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | Total |
| 1 | 1 | | | 1 | 1 | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 12 |
| 2 | 1 | 1 | | 1 | 1 | | | | 1 | | 1 | 1 | 1 | 1 | 1 | | | 1 | 11 |
| 3 | 1 | | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | | | 1 | 12 |
| 4 | 1 | | | 1 | 1 | | | | | | | 1 | 1 | | 1 | | 1 | 1 | 8 |
| 5 | 1 | 1 | 1 | 1 | | | | | 1 | | | 1 | 1 | | 1 | 1 | 1 | 1 | 11 |
| 6 | | | | | | | | | | 1 | | | | | 1 | | | 1 | 3 |
| 7 | | | | 1 | | | | | | | | 1 | | | 1 | | | 1 | 4 |
| 8 | 1 | | | | 1 | | | | 1 | | | 1 | 1 | | 1 | | | 1 | 7 |
| 9 | 1 | 1 | | | 1 | 1 | 1 | | 1 | | | 1 | | | 1 | 1 | 1 | 1 | 11 |
| 10 | 1 | | 1 | 1 | 1 | | | | 1 | | | 1 | 1 | | 1 | 1 | 1 | 1 | 11 |
| 11 | 1 | 1 | | | 1 | | 1 | | 1 | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 12 | 1 | | 1 | | 1 | 1 | | | 1 | 1 | 1 | 1 | | 1 | 1 | | | 1 | 11 |
| 13 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | | 1 | | | 1 | 13 |
| Total | 11 | 5 | 5 | 6 | 10 | 4 | 4 | 2 | 10 | 5 | 4 | 12 | 8 | 4 | 13 | 5 | 5 | 13 | **126** |

**The FSs are listed in Box 4 above; **The biodiversity targets are listed below and summarized in Table 10 &13 in the main text section 3.3.1.*

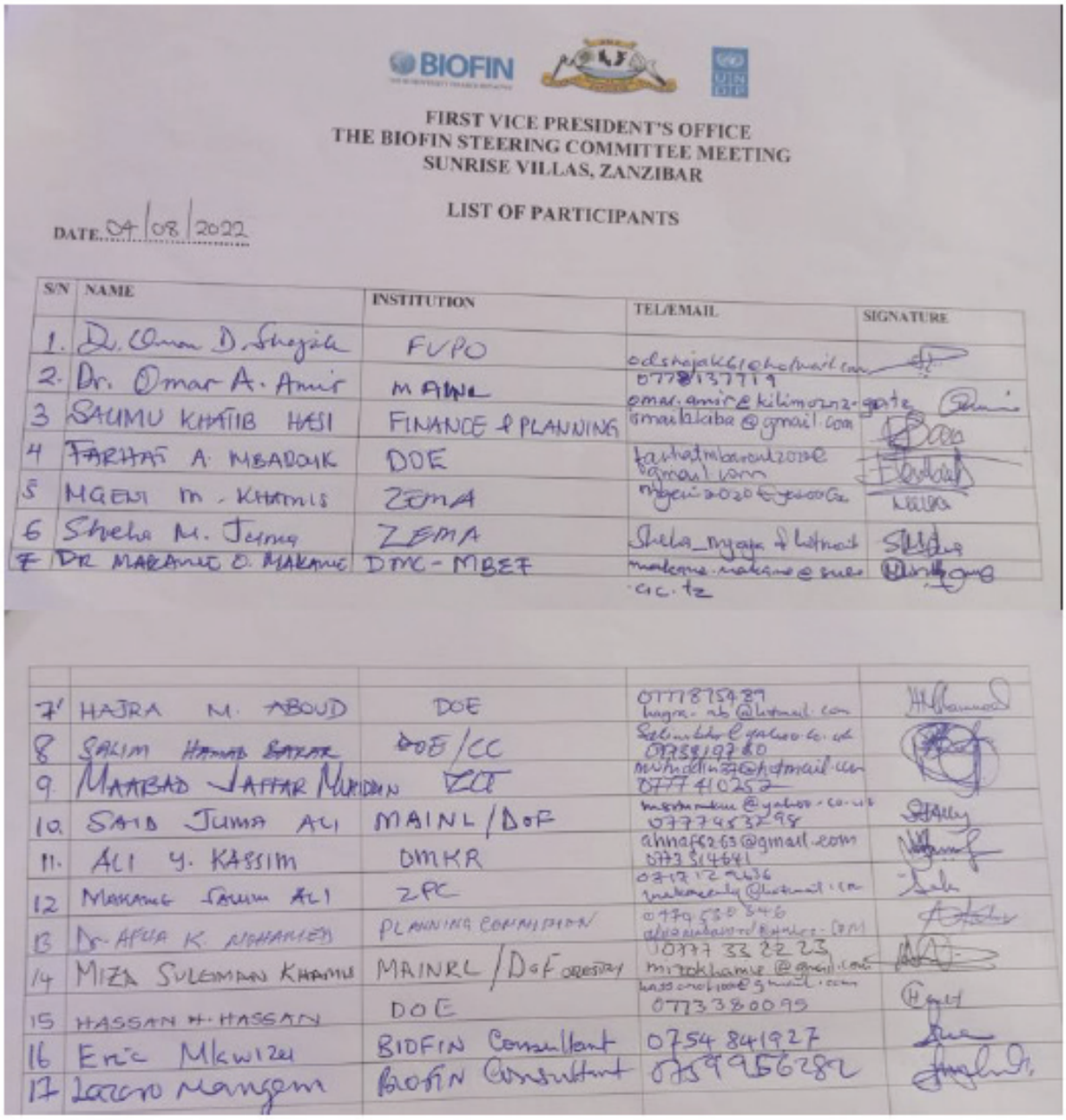
## The list of biodiversity targets

1. *By 2026 at least 20% of the population is aware of the importance of biodiversity and its impact on human wellbeing and socio-economic development of Zanzibar*
2. *By 2026, Programmes for valuation of biodiversity and payments for ecosystem services developed and integrated into sector development strategies and plans*
3. *By 2026, incentives harmful to biodiversity are eliminated, phased out or reformed and positive incentives for conservation and sustainable use of biodiversity are developed and applied*
4. *By 2026 investments in systems of production and consumption based on sustainable eco-friendly practices increased*
5. *By 2026, the rate of degradation and fragmentation of ecosystems and the loss of habitats is significantly reduced*
6. *By 2026, at least nine biodiversity related policies and Legislations are developed, reviewed and enforced*
7. *By 2026, all forms of pollution from water and land-based activities are brought to levels that are non-detrimental to biodiversity ecosystem functions*
8. *By 2026, priority invasive alien species are identified and control measures are in place and implemented*
9. *By 2026, the multiple anthropogenic pressure on coral reef, and vulnerable ecosystems impacted by climatic change are minimized*
10. *By 2026, at least three to five species that require special attention are effectively managed for long-term sustainability*
11. *By 2026, strategies to reduce genetic erosion are developed and implemented to maintain genetic diversity of cultivated plants, farmed and domesticated animals and their wild relatives*
12. *By 2026, ecosystems that provide essential services that contribute to health, livelihoods and well-being are restored and safeguarded taking into account the needs of women, local and vulnerable communities*
13. *By 2026, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced*
14. *By 2026, Fair and Equitable Benefit Sharing arising from utilization of biodiversity resource is in force and operational, consistent with national and international legislations*
15. *By 2026, Zanzibar Biodiversity Strategy and Action Plan - ZABSAP is developed and implemented with effective participation*
16. *By 2026, traditional knowledge and practices relevant for the conservation and sustainable use of biodiversity respected and safeguarded*
17. *By 2026, significant increase in the contribution of knowledge, technology and scientifically based information generated and shared*
18. *By 2026, financial resources in support of biodiversity programmes significantly increased*

## Annex 5: Validation of the Biodiversity Finance Plan (BFP)

The validation meeting for the BFP was held from 3rd – 4th August, 2022 at Sunrise Villa at Jambiani in Zanzibar. It was validated by the Steering Committee meeting (Table A5.1 & A5.2).

**Table A5.1: Participants to the BFP Validation Meeting**



FIRST VICE PRESIDENT'S OFFICE
THE BIOFIN STEERING COMMITTEE MEETING
SUNRISE VILLAS, ZANZIBAR

LIST OF PARTICIPANTS

DATE 04/08/2022

| S/N | NAME | INSTITUTION | TEL/EMAIL | SIGNATURE |
|---|---|---|---|---|
| 1. | Dr. Omar D. Shejak | FVPO | odshejak61@hotmail.com | |
| 2. | Dr. Omar A. Amir | MAINL | 0778137719 omar.amir@kilimo.znz.gov.tz | |
| 3 | SALMU KHATIB HASI | FINANCE & PLANNING | smalklaba@gmail.com | |
| 4 | FARHAT A. MBAROUK | DOE | farhatmbarouk2008@gmail.com | |
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| 6 | Sheila M. Juma | ZEMA | Sheila_myaja@hotmail | |
| 7 | DR MAKAME O. MAKAME | DMC-MBEF | makame.makame@suza.ac.tz | |
| 7 | HAJRA M. ABOUD | DOE | 0777875489 hajra.ab@hotmail.com | |
| 8 | SALIM [illegible] | DOE/CC | Salimbbl@yahoo.co.uk 0755197280 | |
| 9. | MAABAD JAFFAR MURIDIN | ZCT | muhidin22@hotmail.com 0777410252 | |
| 10. | SAID JUMA ALI | MAINL/DoF | [illegible]@yahoo.co.uk 0777453298 | |
| 11. | ALI Y. KASSIM | DMKR | ahnaff263@gmail.com 0773514641 | |
| 12 | MAKAME SALUM ALI | ZPC | 0777122636 [illegible]@hotmail.com | |
| 13 | Dr. AFUA K. NKHAHLEH | PLANNING COMMISSION | 0779 530 546 afuankansah@[illegible].com | |
| 14 | MIZA SULEIMAN KHAMIS | MAINRL/DoF FORESTRY | 0777 33 22 23 mizakhamis@gmail.com | |
| 15 | HASSAN H. HASSAN | DOE | 0773380095 hassanhaji@gmail.com | |
| 16 | Eric Mkwizu | BIOFIN Consultant | 0754 841927 | |
| 17 | Lazaro Nangem | BIOFIN Consultant | 0759956282 | |

**Table A5.2: Typewritten Names of Participants to the BFP Validation Meeting**

Date: 3rd - 4th August, 2022

| S# | Participant | Institution | Contact |
|---|---|---|---|
| 1 | Dr. Omar D. Shajak (Chaireprson) | FVPO | |
| 2 | Dr. Omar A. Amir | MAINRL | 0778137719 |
| 3 | Saumu Khatibu Haji | MoF&P | |
| 4 | Farhat A. Mbarouk | DoE, FVPO | 0776064330 |
| 5 | Mgeni M. Khamis | ZEMA | 0777465539 |
| 6 | Sheha M. Juma | ZEMA | |
| 7 | Dr. Makame O. Makame | DMC, MoBE&F | 0773437143 |
| 8 | Hajra M. Aboud | DoE, FVPO | 0777875489 |
| 9 | Salim Hamad Bakar | DoE, FVPO | 0773819710 |
| 10 | Maabad Jaffar Muhidin | ZCT | 0777410252 |
| 11 | Said Juma Ali | DFNRNR, MAINRL | 0777453798 |
| 12 | Ali Y. Kassim | DMKR | 0773314641 |
| 13 | Makame Salum Ali | ZPC | 0717129636 |
| 14 | Dr. Afua K. Mohamed | ZPC | 0774530346 |
| 15 | Miza Suleiman Khamis | DFNRNR, MAINRL | 0777332223 |
| 16 | Hassan H. Hassan | DoE, FVPO | 0773380095 |
| 17 | Faustine Ninga | UNDP | 0784252495 |
| 18 | Lazaro Mangewa | Consultant UNDP | 0759956282 |
| 19 | Eric Mkwizu | Consultant UNDP | 0754871927 |

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