Annex 4: Revised results framework

# REVISED RESULTS FRAMEWORKS

## PROJECT/PROGRAMME INFORMATION

PROJECT/PROGRAMME CATEGORY: REGULAR PROJECT
COUNTRY/IES: UNITED REPUBLIC OF TANZANIA
TITLE OF PROJECT/PROGRAMME: **IMPLEMENTATION OF CONCRETE ADAPTATION MEASURES TO REDUCE VULNERABILITY OF LIVELHOOD AND ECONOMY OF COASTAL COMUNITIES IN TANZANIA**

TYPE OF IMPLEMENTING ENTITY: **MIE**
IMPLEMENTING ENTITY: **UNEP**
EXECUTING ENTITY/IES: **VICE PRESIDENT'S OFFICE (DIVISION OF ENVIRONMENT)**

| | Activities | Output | Indicator | Baseline | Target[1] | Source of verification |
|---|---|---|---|---|---|---|
| **Component 1: Addressing climate change impacts on key infrastructure and settlements**<br><br>**Outcome 1: Averse impacts of sea level rise and floods on coastal infrastructure and settlements reduced** | Rehabilitate coastal protection facilities to protect settlements economic and cultural infrastructure | Seawall raised, rehabilitated, constructed in areas showing particular damage. | Length of seawalls upgraded to manage the effects of climate change | Dar es salaam seawall (2.6km) showing signs of severe degradation at Ocean Road and Kingomboni | **Original**<br><br>1335 linear meters of seawall rehabilitated along the Ocean Road (Kivukoni-Upanga East) and Kigamboni<br><br>**Proposal in baseline study**<br><br>By project end-point:<br><br>145 meters of seawall upgraded along Kigamboni seawall<br><br>221 meters of seawall constructed in | • Engineering reports<br>• Physical assessments (including photographs and GPS coordinates) |

[1] New targets are for only seawalls (at 50yrs design life) and drainages. Other targets remain the same as communicated to the AFSec in February 2015. The Project Steering Committee endorsed the new targets on 11th March 2016.

| | Activities | Output | Indicator | Baseline | Target[1] | Source of verification |
|---|---|---|---|---|---|---|
| | | | | | Kigamboni<br><br>800 meters of seawall upgraded along Ocean Road<br><br>500 meters constructed along Ocean Road<br><br>**<u>Final revised proposal for approval by PSC and AF</u>**<br><br>1400 linear meters of seawall rehabilitated and constructed along the Ocean Road/***now known as Obama road*** (950m) and Kigamboni (450m). | |
| | Clean drainage channels and rehabilitate storm water drains in Dar es Salaam | Effective storm and flood drainage systems in urban areas and near coastal communities | Xm increase along X m of drainage channels and X m of stormwater drains. | $X^2$ m | **<u>Original</u>**<br><br>a 50% reduction in the number of flooding events during rainy season in targeted sites.<br><br>**<u>Proposal in baseline study</u>**<br><br>By project end-point, at least 5 ($Xm^3$) sites of drainage channels | • Engineering assessments following methodology of feasibility assessment |

[2] The feasibility study will establish the actual volume
[3] The actual number will be established by the feasibility study

| | Activities | Output | Indicator | Baseline | Target[1] | Source of verification |
|---|---|---|---|---|---|---|
| | | | | | cleaned and rehabilitetd.<br>**Sites: Kinondoni Municipality:**<br>i) Tandale street in Tandale ward; and<br>ii) Kawe street in Kawe ward.<br>**Ilala Municipality:**<br>i) Bungoni Street in Buguruni ward.<br>**Temeke Municipality:**<br>Miburani-Mtoni Bustani streets in Mtoni ward; and<br>ii) Butiama Street (Butiama drainage) in Kijichi ward.<br><br>**Final revised proposal for approval by PSC and AF**<br><br>By project end-point, at least 2300m (40%: construction, 60%: rehabilitation/upgrading) of drainage channels cleaned and rehabilitetd.<br>**Sites:**<br>**Ilala Municipality:**<br>Bungoni Street in Buguruni ward (1050m)<br>**Temeke Municipality:**<br>Miburani-Mtoni Bustani streets in Mtoni ward (1250m). | |

| | Activities | Output | Indicator | Baseline | Target[1] | Source of verification |
|---|---|---|---|---|---|---|
| **Component 2: Ecosystem-Based Integrated Coastal Area Management (EBICAM)**<br><br>**Outcome 2: Coastal ecosystems are rehabilitated and ICAM is implemented** | Rehabilitate coastal ecosystems for climate resilience through the implementation of a GreenJobs program | Appropriate alternative energy (efficient cook stoves, small solar) technology transferred for avoided deforestation including through training | Number of households receiving: i) efficient cookstoves; and ii) training on optimal use and maintenance of these stoves (disaggregated by age and gender). | No baseline data | **Original**<br><br>1500 households with access to alternative and or efficient energy sources (disaggregated by gender).<br><br>**Proposal in baseline study**<br><br>By project end-point, at least 1,500 households<br><br>**Final revised proposal for approval by PSC and AF**<br><br>By project end-point, at least 1,500 households from Ilala, Kinondoni and Temeke Municipal Councils | • Project implementation reports<br>• Registers of families that have received cookstoves |
| | | Mangrove rehabilitation through planting of resilient seedlings, dredging and the creation of no-take buffer zones | Area of mangroves rehabilitated | There are approximately 2,000 ha of mangroves in Dar es Salaam surroundings | **Original**<br><br>Mangrove rehabilitation underway in a total area of 40 ha.<br><br>**Final revised proposal for approval by PSC and AF (as presented in baseline study)**<br><br>By project end-point, 40 ha of mangrove rehabilitated in one or | • Project implementation reports<br>• GPS data collection at project sites |

| | Activities | Output | Indicator | Baseline | Target[1] | Source of verification |
|---|---|---|---|---|---|---|
| | | | | | more of the following areas: Salender Bridge, Kunduchi, Mbweni and Ununio. | |
| | | Coral reef rehabilitation and protection in coastal sites | Area of reef under rehabilitation | No baseline data | **Original**<br>2000m$^2$ (0.2 ha)<br>**Proposal in baseline study**<br>By project end-point, X m$^2$ under rehabilitation.[4]<br>**Current target pending input from reef specialist**<br>2000m$^2$ (0.2 ha) | • Data collection at project sites<br>• (GPS points and polygons digitised in a GIS to determine the areas in which rehabilitation has been conducted). |
| | | Shoreline stabilisation and rehabilitation using trees and grasses | Area of coastal vegetation rehabilitated by the AF project using species that are good at stabilising sandy soils. | Rate of coastal erosion estimated between 3 and 8m per year according to recent site specific surveys | **Original**<br>1500m (20m wide)<br>**Proposal in baseline study**<br>By project end-point, at least 56,430 m2 of coastal vegetation rehabilitated using three or more fast-growing plant species. | • Project implementation reports<br>• Data collection at project sites<br>• (GPS points and polygons digitised in a GIS to determine the areas in which rehabilitation has been conducted). Project implementation |

[4] The coral reef specialist will determine this rate

| | Activities | Output | Indicator | Baseline | Target[1] | Source of verification |
|---|---|---|---|---|---|---|
| | | | | | **<u>Final revised proposal for approval by PSC and AF</u>**<br><br>By project end-point, at least 56,430 $m^2$ of coastal vegetation rehabilitated using indigenous resilient trees and grasses | reports<br>• Data collection at project sites |
| | | **N/A** | Survivorship of plants and coral in areas that are rehabilitated | N/A | **<u>Original</u>**<br><br>NIL<br><br>**<u>New proposal based on baseline study for approval by PSC and AF</u>**<br><br>Annually, at least[5]:<br>• 65% survivorship of mangrove species.<br>• 65% survivorship of shoreline vegetation species.<br>• X[6]$m^2$ survivorship of coral reefs. | • See data collection protocols<br>• Monitoring of this indicator should be coordinated by experts but conducted by coastal communities at intervention sites. |
| **Component 3: Knowledge, coastal monitoring and policy linkages** | Stocktaking and assessment of physical coastal processes Monitoring of the | Performance of a baseline study based on coastal vulnerability | Number of comprehensive baseline studies on coastal vulnerability | No baseline data | **<u>Original</u>**<br><br>1 baseline study in year 1 | • Project implementation reports<br>• Baseline assessment |

[5] All survivorship percentages are based on the assumption that rehabilitation interventions are not undermined by any extreme environmental events or natural disasters

[6] The coral reef specialist will determine this rate.

| | Activities | Output | Indicator | Baseline | Target[1] | Source of verification |
|---|---|---|---|---|---|---|
| **Outcome 3: Knowledge of climate impacts and adaptation measures increased** | evolution of coastal processes | | developed for Dar es Salaam. | | **Final revised proposal for approval by PSC and AF (as presented in baseline study)**<br><br>1 baseline study in year 2. | report |
| | | Create and operate a climate change observatory for Tanzania for ongoing monitoring of CZM and coastal environmental status and scientific research | Number of operational clearing house functions implemented | No baseline data | **Original**<br><br>Clearing house function is operational by mid-term.<br><br>**Final revised proposal for approval by PSC and AF (as presented in baseline study)**<br><br>By project mid-term, 1 operational clearing house function. | • Project implementation reports<br>• Institutional and organisational reports |
| | | Assessment of the economic viability and practical feasibility of adaptation measures (i.e. through undertaking cost-benefit analyses) | Number of cost-benefit reports on measures for adapting to climate change implemented<br><br>Number of reports on strategies for upscaling measures with the most favourable cost-benefit ratio. | No baseline data<br><br>No baseline data | **Original**<br><br>Measures are identified for upscaling and policy uptake on an ongoing basis.<br><br>**Final revised proposal for approval by PSC and AF (as presented in baseline study)**<br><br>Annually, at least 1 report. | • Project reports.<br>• Annual cost-benefit assessment reports |

| | Activities | Output | Indicator | Baseline | Target[1] | Source of verification |
|---|---|---|---|---|---|---|
| | | | | | | |
| | Assessment of the economic viability and practical feasibility of adaptation measures (i.e. through undertaking cost-benefit analyses) | lessons learned from the project outputs documented | Number of policy briefs on cost-effective measures and lessons learned<br><br>Number of workshops on cost-effective measures and lessons learned[7] conducted with relevant sectors. | No baseline data<br><br>0 workshops. | **Original**<br>3 briefing notes per year.<br><br>**Final revised proposal for approval by PSC and AF (as presented in baseline study)**<br>Annually, 2 policy briefs (1 on measures to adapt to climate change, 1 on general lessons learned).<br><br>**Original**<br>2 workshops during the project.<br><br>**Final revised proposal for approval by PSC and AF (as presented in baseline study)**<br>By project end-point, 2 workshops (1 on cost-effective measures to adapt to climate change, 1 on general lessons learned). | • Project implementation reports.<br>• Policy briefs<br>• Workshop reports |

[7] Based on policy documents developed by the AF project.

| | Activities | Output | Indicator | Baseline | Target[1] | Source of verification |
|---|---|---|---|---|---|---|
| | | District level administration have the capacity to adequately manage rehabilitated infrastructure | Number of reports developed through the AF project on required district budget allocations to maintain infrastructure for adaptation to climate change. | 0 | **Original**<br><br>Dar es Salaam Municipal Councils earmarks appropriate annual allocations for infrastructure maintenance<br><br>**Final revised proposal for approval by PSC and AF (as presented in baseline study)**<br><br>By the end of the third year, 1 report. | Project implementation reports.<br>Report on budget recommendations. |
| | Development of EBICAM Action Plan | One EBICAM Action Plan for the coastal region is approved | Number of plans approved | No plan exists as yet but ICZM capacity exists | **Original**<br><br>One plan approved by end of project.<br><br>**Final revised proposal for approval by PSC and AF (as presented in baseline study)**<br><br>By project end-point, 1 plan. | project reports, plans and policies |