

## United Nations Development Programme Country: Tanzania

 PROJECT DOCUMENT

| Project Title: | Enhancing the Forest Nature Reserves Network for Biodiversity <br> Conservation in Tanzania |
| :--- | :--- |
|  | Cluster 1: Growth for reduction of income poverty <br> Component 2: Environment and Climate Change |
| UNDAP Outcome(s) |  |
| and Output(s): |  |$\quad$| Outcome 2: Relevant MDAs, LGAs and Non-State Actors improve |
| :--- |
| enforcement of environment laws and regulations for the protection of |
| ecosystems, biodiversity and the sustainable management of natural |
| resources |
| Output 2.3: Improved capacity for sustainable management of protected |


| Programme Period: | 5 years |
| :--- | :--- |
| Atlas Award ID: |  |
| Project ID: | 5034 |
| PIMS \# | 5106 |
| Start date: | 2014 |
| End Date: | 2019 |
| Management Arrangements: | NIM |
|  |  |


| Total budget | USD 23,700,000 |
| :--- | :--- |
|  |  |
| GEF | USD $\mathbf{4 , 1 0 0 , 0 0 0}$ |
| Government | USD $15,000,000$ |
| UNDP | USD $1,000,000$ |
| TFCG | USD $1,800,000$ |
| EAMCEF | USD 1,000,000 |
| WWF | USD 400,000 |
| WCS | USD 400,000 |



Date/Month/Year


## Brief Description

The Forest Nature Reserve (FNR) category of protected area (PA) offers the highest level of protection under the Forest Act in Tanzania. FNRs are state-owned and managed by Tanzania Forest Service (TFS). No extraction of woody or animal species is allowed in FNRs and activities are generally restricted to research, education and nature-based tourism.

To date, five FNRs - Amani (8,380ha); Uluguru (24,115ha); Kilombero (134,511ha); Nilo (6,225ha); and Rungwe ( $13,652 \mathrm{ha}$ ) - have been formally proclaimed. Of these, one - Rungwe - is however not yet fully operational.
A further six sites representing centers of high biodiversity and endemism - Chome (14,283ha), Magamba (9,283ha), Mkingu (23,388ha), Uzungwa Scarp (32,763ha), Rondo Plateau (14,000ha) and Minziro ( $25,000 \mathrm{ha}$ ) - have been proposed for proclamation as FNRs. Of these, only one - Rondo Plateau - is in the process of proclamation and operationalisation.

The project has been organised into two components, and will be implemented over a period of five years. The first component of the project will support the continued expansion of the FNR network by facilitating the gazetting of five new FNRs (Chome, Magamba, Mkingu, Minziro and Uzungwa Scarp) and improving the planning, operations and governance of these five new FNRs, as well as one existing FNR (Rungwe).It will also encourage a more consistent and cohesive approach to the planning and management of the six targeted FNRs as an integral part of the broader network of 11 FNRs. Component 1 has four key areas of project support: (i) securing the conservation status and boundaries of the six FNRs; (ii) supplementing the core staffing complement, infrastructure and equipment in the six FNRs; (iii) strengthening the governance of, and benefit sharing in, the six FNRs; and (iv) enhancing the capacity of the TFS to plan and administer the six FNRs as an integral part of the wider FNR network.

The second component of the project is focused on enhancing the financial sustainability of the entire network of 11 FNRs to ensure that they incrementally develop the capacity (over the longer-term) to generate adequate financial resources to cover the full costs of their management.
Component two has three key areas of project support: (i) facilitating public-private partnerships in the commercial development of tourism and recreational facilities and services in FNRs; (ii) marketing the destinations, attractions, facilities and services of FNRs; and (iii) implementing other income-generating activities in targeted FNRs.

The total costs of investment in the project is estimated at US $\$ 23,700,000$, of which US $\$ 4,100,000$ constitutes grant funding from GEF and US $\$ 19,600,000$ comprises co-financing.

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## ACRONYMS

| APO | Annual Plan of Operation |
| :---: | :---: |
| APR | Annual Progress Report |
| APW | Annual Plan of Work |
| AWP | Annual Work Plan |
| CA | Conservation Area |
| CBD | Convention on Biological Diversity |
| CBF | Community Based Forestry |
| CBFM | Community Based Forest Management |
| CBNRM | Community-Based Natural Resource Management |
| CBO | Community Based Organisation |
| CEPF | Critical Ecosystem Partnership Fund |
| CFR | Community Forest Reserve |
| CI | Conservation International |
| CITES | Convention on International Trade in Endangered Species |
| CO | (UNDP) Country Office |
| COP | Conference of Parties |
| CPAP | CountryProgramme Action Plan |
| DANIDA | Danish Agency for Development Assistance |
| DFID | United Kingdom Department for International Development |
| DFO | District Forest Officer |
| DLR | Department of Lands and Registration |
| DLUP | District Land Use Plan |
| DO | DecIaration Order |
| DPG | Development Partners Group |
| DRC | Democratic Republic of Congo |
| EAC | East African Community |
| EAM | Eastern Arc Mountains |
| EAMCEF | Eastern Arc Mountains Conservation Endowment Fund |
| EARO | Eastern Africa Regional Office (IUCN) |
| EBA | Endemic Bird Area |
| EIA | Environmental Impact Assessment |
| EMA | Environmental Management Act |
| EOI | Expression Of Interest |
| EU | European Union |
| EUTC | East Usambara Tea Company |
| FAO | Food and Agriculture Organisation (of the United Nations) |


| FBD | Forest and Beekeeping Division (of the MNRT) |
| :---: | :---: |
| FCFP | Forest Carbon Partnership Facility (World Bank) |
| FINNIDA | Finnish International Development Agency |
| FIP | Forest Investment Programme (World Bank) |
| FFI | Fauna and Flora International |
| FNR | Forest Nature Reserve |
| FR | Forest Reserve |
| FRA | Forest Resource Assessment |
| GCA | Game Controlled Area |
| GDP | Gross Domestic Product |
| GEF | Global Environment Facility |
| GG | Government Gazette |
| GII | Gender Inequality Index |
| GIS | Geographical Information System |
| GMP | General Management Plan |
| GN | Govermment Notice |
| GNI | Gross National Income |
| Got | Government of Tanzania |
| GR | Game Reserve |
| HDI | Human Development Index |
| IAS | Invasive Alien Species |
| IBA | Important Bird Area |
| ICER | Incremental Cost Effectiveness Ratio |
| IFC | International Finance Corporation (of the World Bank) |
| IT | Information Technology |
| ITCZ | Inter-Tropical Convergence Zone |
| IUCN | International Union for the Conservation of Nature |
| JAS' | Joint Assistance Strategy |
| JFM | Joint Forest Management |
| JICA | Japan International Cooperation Agency |
| JMA | Joint Management Agreement |
| KBA | Key Biodiversity Area |
| KfW | KreditanstaltfürWiederaufbau |
| LAFR | Local AuthorityForest Reserve |
| LGRA | Local Government Reform Agenda |
| M\&E | Monitoring and Evaluation |
| MDA(s) | (Government) Ministries, Departments and Agencies |
| MDG | Millennium Development Goal |
| METT | Management Effectiveness Tracking Tool |


| MFEA | Ministry of Finance and Economic Affairs |
| :---: | :---: |
| MJUMITA | MitandaoyaJamiiyaUsimamiziwaMisitu Tanzania (Comnnunity Network in Forest Conservation in Tanzania) |
| MKUKUTA | MkakatiwaKukuza an KupunguzaUmaskini Tanzania (National Strategy for Growth and Reduction of Poverty) |
| MNRT | Ministry of Natural Resources and Tourism |
| MOU | Memorandum of Understanding |
| MPI | Multidimensional Poverty Index |
| MWECL | Ministry of Water, Construction and Lands |
| MWLD | Ministry of Water and Livestock Development |
| NAFORMA | National Forestry Resources Monitoring and Assessment |
| NBSAP | National Biodiversity Strategy and Action Plan |
| NEP | National Environmental Policy |
| NFP | National Forest Programme |
| NFR | National Forest Reserve |
| NGO | Non-Government Organisation |
| NIM | National Implementation (Modality) |
| NORAD | Norwegian Agency for Development Cooperation |
| NP | National Park |
| NPO | Not for Profit Organisation |
| NSGRP | National Strategy for Growth and Reduction of Poverty |
| PA | Protected Area |
| PC | Project Coordinator |
| PES | Payment for Ecosystem Services |
| PFM | Participatory Forest Management |
| PGR | Partial Game Reserve |
| PIR | Project Implementation Report |
| PoWPA | (CBD) Programme of Work on Protected Areas |
| PPP | Public-Private --Partnership/ Purchasing Power Parity |
| PPR | Project Progress Report |
| PRSP | Poverty Reduction Strategy Paper |
| PSC | Project Steering Committee |
| RCU | (UNDP) Regional Coordinating Unit |
| RFP | Request For Proposal |
| RMP | Reserve Management Plan |
| RTA | (UNDP) Regional Technical Adviser |
| SBAA | Standard Basic Assistance Agreement |
| SLA | Service Level Agreement |
| SME | Small to Medium Enterprises |
| SO | Strategic Objective |


| SP | Strategic Programme |
| :---: | :--- |
| TAFORI | Tanzania Forestry Research Institute |
| TANAPA | Tanzania National Parks Authority |
| TANROADS | Tanzania Roads Agency |
| TAWIRI | Tanzania Wildlife Research Institute |
| TBA | Tanzania Building Agency |
| TBW | Total Budget and Work plan |
| TFCG | Tanzania Forest Conservation Group |
| TFCMP | Tanzania Forest Conservation and Management Programme |
| TFF | Tanzania Forest Fund |
| TFS | Tanzania Forest Service |
| TNC | The Nature Conservancy |
| TTB | Tanzania Tourism Board |
| TTFC | Tanzania (National) Tree Seed Centre |
| UNDP | United Nations Development Programme |
| UNEP | United Nations Environment Programme |
| UNESCO | United Nations Environment, Scientific and Cultural Organisation |
| UNFCC | United Nations Framework Convention on Climate Change |
| URT | United Republic of Tanzania |
| USAID | United States Agency for International Development |
| VEMP | Village Environmental Management Plan |
| VFMA | Village Forest Management Area |
| VFR | Village Forest Reserve |
| VLFR | Village Land Forest Reserve |
| VPO | Vice Presidents Office |
| WB | World Bank |
| WBS | Work Breakdown Structure |
| WCS | Wildlife Conservation Society |
| WCST | Wildlife Conservation Society of Tanzania |
| WD | Wildlife Division (of the MNRT) |
| WHS | World Heritage Site |
| WMA | Wildlife Management Area |
| WWF | World Wide Fund for Nature |

## SECTION I: ELABORATION OF THE NARRATIVE

## PART I: Situation Analysis

## CONTEXT AND GLOBAL SIGNIFICANCE

## Administrative context

1. Tanzaniais the largest country in East Africa, covering an area of $945,087 \mathrm{~km}^{2}$ (of which 886,037 $\mathrm{km}^{2}$ is surface land). It borders Uganda and Kenya to the north; Rwanda, Burundi, and the Democratic Republic of Congo (DRC) to the west; and Zambia, Malawi and Mozambique to the south (see Map 1 below). The country's eastern borders lie on the Indian Ocean. It has 800 km of coastline, with a continental shelf in the region of $30,000 \mathrm{~km}^{2}$.


Map 1: Topographic map of Tanzania
2. Tanzania is a unitary republic - the United Republic of Tanzania (URT) - formed by the union of Tanganyika and Zanzibar in 1964. There are two governments: the Union Governmentof the URT and the Revolutionary Government of Zanzibar. The Union Government has authority over all union matters in the UR'T and over all other matters concerning Mainland Tanzania; while the Revolutionary Government of Zanzibar has authority in Tanzania Zanzibar (i.e. the Zanzibar archipelago) over all matters which are not union matters. Each Central Government has three organs - the Executive, Judiciary and Legislature - that have powers over the conduct of public affairs.
3. The URTs administration is organized into 30 regions (or "mikoa") - each made up of several Districts - with twenty-five regions on the mainland, three on Unguja (known informally as Zanzibar Island) and two on Pemba Island. Local Government authorities assist each central government in each administrative region.
4. All land in the URT ${ }^{1}$ is vested in the President, who holds the land in trust for present and future generations. Land can only be acquired through custom/tradition or a grant by the Commissioner for Lands, who administers land on behalf of the President (as set out in the National Land Policy). The 1999 National Land Act and Village Land Act provide the legal framework for Tanzania's three land tenure categories -'reserved' land, 'village' land and 'general' land. Reserved land is land set aside by the government for a specific purpose (including forest reserves, game parks/reserves, public utilities/highways, 'hazardous land' and land designated under the Town and Country Planning Ordinance). Village land is land that is under the direct management of village governments ${ }^{2}$ and includes land for settlement as well as local use, contained within the "village area". General land is a residual land category, and is broadly defined as the remaining land in Tanzania which is not classified as reserved land or village land ${ }^{3}$.
5. The Capital City is Dodoma, and the major commercial city is Dar es Salaam. The official currency is the Tanzanian Shilling. The national language is Kiswahili,with English widely used in official communication.
6. In 2013, it was estimated that the Tanzania mainland had about 48 million ha of forests and woodlands, representing around $43 \%$ of total land area (NAFORMA, 2013). These forests and woodlands are adminstratively distributed as follows:

Table 1: Administrative Distribution of Forests and Woodlands in Tanzania

| Designated Owner/Classification | Forest Area (ha) | $\begin{aligned} & \% \text { of } \\ & \text { Total } \end{aligned}$ | Comments |
| :---: | :---: | :---: | :---: |
| Central Government | 16.8 million | 35\% | This includes all National Forest Reserves, Forest Nature Reserves and the forests and woodlands located in other categories of protected areas (e.g. National Parks and Game Reserves) . |
| Local Authorities | 3.36 million | 7\% | This includes all Local Authority Forest Reserves (mostly production forests). These forests are poorly managed and |

[^0]| Designated Owner/Classification | Forest Area (ha) | $\begin{aligned} & \text { \% of } \\ & \text { Total } \end{aligned}$ | Comments |
| :---: | :---: | :---: | :---: |
|  |  |  | therate of degradation is high due to the impacts of charcoal production, illegal logging and destructive fires. |
| Village Governments | 21.6 million | 45\% | This includes all fores//woodland resources owned by villages under the Village Land Act, but restricted in use under the Forest Act unless the village declare or gazette it as a Village Forest Reserve. If not gazetted or declared, the central Government collects revenues from the forests/woodlands within the village land boundaries. |
| Private Sector | 3.36 million | 7\% | Some private companies, such as the East Usambara Tea Company (EUTC), own some natural forests. However, many individuals and some companies have opted to plant commerical plantations, especially in the Southern Highlands regions (Iringa, Njombe and Mbeya) and the Kagera region. As at 2012, a total of about 350,000 ha was under some form of plantation forestry. |
| Forests in General Land | 2.88 million | 6\% | Includes forests managed under the Forest Act, and mainly used to collect central government revenues. Degradation of forest and woodland resources is high in these forests as a result of charcoal-making and uncontrolled harvesting for timber and poles. |

## Geographical context

7. Tanzania has a wide variety of physical features, from a narrow coastal belt with sandy beaches to an extensive plateau covered by savannah and woodland vegetation with altitude ranging from 1,000 to $2,000 \mathrm{~m}$. The plateau is fringed by narrow belts of forest highland. Tanzania shares several major fresh water bodies including Lake Victoria (the largest in Africa), Lake Tanganyika (the longest and deepest in Africa) and Lake Nyasa. The mainland includes a large central plateau of ancient and heavily eroded landforms which support various woodland habitats. A series of mountain ranges rise out of this plateau, each with different histories but all supporting natural forest, grassland and 'heath' vegetation types. In the far west of the country the Mahale Mountains and associated smaller ranges occupy the margins of the Albertine Rift, a system that has resulted in the deep depressions of Lake Tanganyika. In the north a series of large volcanoes arise from the plains, including Kilimanjaro (Africa's highest mountain at $5,895 \mathrm{~m}$ ) and Mount Meru. Further east, in a broad Arc from Kilimanjaro to south-western Tanzania, a series of uplifted blocks of ancient rock form the Eastern Arc and associated Southern Highlands. The Great Rift Valley runs from north-east of Africa through central and southern Tanzania and adds to the distinctive landscape. At Lake Nyasa it splits, with one branch proceeding south beyond the Lake to Mozambique and another branch to the north-west alongside Burundi, Rwanda, Tanzania and western Uganda. The rift valley is dotted with lakes, including Lakes Rukwa, Tanganyika, Nyasa, Kitangiri, Eyasi and Manyara, as well as the scenic Ngorongoro Crater. From the highlands and the central plateau flow drainage systems connected to the Indian Ocean, Atlantic Ocean, and Mediterranean Sea.
8. Tanzania has a tropical climate but has regional variations due to topography.In the highlands, temperatures range between $10^{\circ}$ and $20^{\circ} \mathrm{C}$ during cold and hot seasons respectively. The rest of the country
has temperatures rarely falling lower than $20^{\circ} \mathrm{C}$. The hottest period extends between November and February $\left(25-31^{\circ} \mathrm{C}\right)$ while the coldest period occurs between May and August $\left(15-20^{\circ} \mathrm{C}\right)$.
9. Seasonal rainfall is driven mainly by the migration of the Intertropical Convergence Zone (ICZ). The ICZmigratessouthwards through Tanzania in October to December, reaching the south of the country in January and February, and returning northwards in March, April, and May. This causes the north and east of Tanzania to experience two distinct wet periods - the short rains (or "Vuli") in October to December and the long rains (or "Masika") from March to May - while the southern, western, and central parts of the country experience one wet season that continues October through to April or May.

## Socio-economic context

10. Tanzania has a population of $44,928,923$, of which $43,625,354$ are on the Tanzania mainland and 1,303,569 are in Tanzania Zanzibar (2012 Population and Housing Census).
11. Between 1990 and 2012, Tanzania's Human Development Index (HDI) value increased from 0.353 to $0.476^{4}$, positioning the country at 152 out of 187 countries and territories (UNDP Human Development Report, 2013). Between 1980 and 2012, Tanzania's life expectancy at birth increased by 8.4 years, the average number of years of schooling increased by 2.6 years and the expected years of schooling increased by 2.1 years. Tanzania's Gross National Income (GNI)in 2012 was 73.59 billion PPP (Purchasing Power Parity) dollars. The GNI per capita has increased by about 69 percent between 1990 (500 PPP dollars) and 2012 (1,590 PPP dollars).
12. Tanzania has a Gender Inequality Index (GII) value of 0.556 , ranking it 119 out of 148 countries in the 2012 index. In Tanzania, 36 percent of parliamentary seats are held by women, and 5.6 percent of adult women have reached a secondary or higher level of education (compared to 9.2 percent of their male counterparts). For every 100,000 live births, 460 women die from pregnancy-related causes; and the adolescent fertility rate is 128.7 births per 1000 live births. Female participation in the labour market is 88.2 percent compared to 90.3 for men.
13. The most recent survey data available for estimating Multidimensional Poverty Index (MPI) ${ }^{5}$ figures for Tanzania were collected in 2010. The country's MPI value - which is the share of the population that is multi-dimensionally poor, adjusted by the intensity of the deprivations - was 0.332 . In Tanzania 65.6 percent of the population lived in multidimensional poverty (the MPI 'head count') while an additional 21 percent were vulnerable to multiple deprivations. The intensity of deprivation - that is, the average percentage of deprivation experienced by people living in multidimensional poverty - in Tanzania was 50.7 percent ${ }^{6}$.
14. Tanzania continues to do well in maintaining overall macroeconomic stability which, along with institutional and policy reforms, has been a fundamental factor behind the strong economic growth rates in the country. The main drivers of growth are agriculture, manufacturing, wholesale and retail trade, transport and communication activities. The economy has also contimed to record strong export growth.
[^1]The real growth rate of Gross Domestic Product (GDP) - estimated at US $\$ 27.98$ billion in 2012 - has increased annually between 2010 and 2012 at an average of $6.6 \%$ per annum. Tanzania's medium-term growth prospects are around $7 \%$, significantly boosted by natural gas discoveries.
15. Rapid aggregate GDP growth has however not led to substantial reductions of poverty or improvements in overall socio-economic conditions for most of the population. Tanzania remains one of the world's poorest economies in terms of per capita income (Gross National Income per capita ${ }^{7}$ of US\$570 in 2012).
16. The under-performance in the agriculture sector (which accounts for more than a quarter of the GDP, provides $85 \%$ of exports and employs about $80 \%$ of the work force) has been a key factor in jobless growth and continued high levels of unemployment.Tanzania's industrial and construction sector - accounting for $24.1 \%$ of GDP, one of the fastest growing in Africa (2010 rankings) - has also been severely affected by persistent power shortages.
17. The country has vast mineral resources including gold, diamonds, coal, iron ore, uranium, nickel, chrome, tin, platinum, coltan, niobium and other minerals. It is the third-largest producer of gold in Africa, after South Africa and Ghana, and is a unique source of Tanzanite gemstones. Tanzania also has considerable reserves of natural gas.
18. Tourism, one of the fastest growing sectors in the country, accounts for an estimated $17 \%$ of Tanzania's GDP.With $1,077,000$ international tourists visiting Tanzania in 2012, tourism contributed more than $25 \%$ of foreign exchange earnings. The value for international tourism receipts(i.e. expenditures by international inbound visitors, including payments to national carriers for international transport) in Tanzania was estimated at US $\$ 1,712,000,000$ in 2012. Tourism generates around 250,000 (direct and indirect) jobs in Tanzania ( $\sim 2 \%$ of the labour force).Notably, tourism in Tanzania is concentrated in the Northern Crrcuit (Arusha, Kilimanjaro and Zanzibar), with more than 90 percent of visitors spending nost of their time in these areas.
19. The forestry sectorsupplies more than $90 \%$ of the country's energy resources (primarily in the form of charcoal and firewood). It also supplies about $75 \%$ of the country's construction materials. Forestryrelatedactivities currently supportthe employment of about 730,000 people. The forestry sectorgenerates approximately $10-15 \%$ of exports and $10 \%$ of foreign exchange earnings. In 2011 the sector accounted for about $2.2 \%$ of GDP.

## Biodiversity context - global significance

20. Tanzania is a major repository of globally significant biodiversity, ranking amongst the top countries in tropical Africa in terms of the representivity of ecoregions, richness of species and extent of species endemism. Tanzania lies at the meeting point of six major bio-geographic zones: the dry Somali-Maasai; savannahs; the acacia-conumiphora woodlands; the Guinea-Congolian forest; the coastal forest mosaic; and the scattered afro-montane/afro-alpine areas. Over thirty major vegetation communities are recognized, hosting more than 10,000 plant species (of which more than $15 \%$ are endemic).
21. The species inventory includes more than 300 mammal species, over 1,100 species of birds (one of the largest avifauna in Africa, with 56 species of global conservation concern) and over 360 species of

[^2]herpetofauna (of which 99 species are endemic). According to the IUCN Red List, Tanzania ranks $15^{\text {th }}$ in the world in terms of mammal diversity (with 359 species) and $20^{\text {th }}$ for amphibian diversity ( 178 species). There are 7 'Alliance for Zero Extinction' sites, 4 natural World Heritage Sites and 4 Ramsar sites.
22. Tanzania contains two areas designated by Conservation International as Global Biodiversity Hotspots: the Eastern Afro-montane forests (Eastern Arc and Albertine Rift components); and the Eastern African Coastal Forests. It also has eight WWF-designated Critical Eco-Regions: the Albertine Rift Montane Forest; Kenya-Tanzania Montane Forest; Eastern Arc Forest; Southern Rift Forest / Grassland mosaic; Coastal Forest Mosaic; Guinea-Congolian Forest Mosaic; Acacia Savannah; and Miombo Woodland.
23. Wetlands constitute about $10 \%$ of Tanzania's land area. Theyinclude a wide range of inland, coastal and marinehabitats with some common features. Four wetlands, with a total surface area of about 4,868,424 ha, have been designated as Ramsar sites: the Kilombero valley floodplain; Lake Natron Basin;Malagarasi-Muyowosi wetlands; and the Rufiji-Mafia-Kilwa Marine Ramsar site.

## Biodiversity context-forests and woodlands of the Tanzania mainland

24. The main forest and woodland types are the extensive miombo woodlands in lowland areas across the central and southern parts of the country, the acacia woodlands in the northern regions, the coastal forest/woodland mosaic in the east, mangrove forests along the Indian Ocean coast, and theclosed canopy high forests on the ancient mountains of the Eastern Arc in the east, on the Albertine Rift and Lake Tanganyika in the west, and on the younger volcanic mountains in the north.
25. Most of Tanzania's forests are of the dry woodland type (Miombo woodlands and Acacia savannah woodlands, totalling $\sim 39.5$ million ha), with the remainder comprising:coastal forests ( $\sim 800,000 \mathrm{ha}$ ); Eastern Arc and other montane catchment forests ( $\sim 350,000 \mathrm{ha}$ ); mangrove forests ( $\sim 115,000 \mathrm{ha}$ ); wetland forests ( $\sim 200,000 \mathrm{ha}$ ) and Guinea-Congolean lowland forests ( $\sim 670,000 \mathrm{ha}$ ).
26. The miombo woodlands and acacia woodlands of Tanzania constitute huge wilderness areas that support some of the largest assemblages of large mammals in the world, including large herbivores (e.g. elephant, rhinoceros, hippo, giraffe, buffalo), migratory plains game (e.g. zebra, wildebeest, eland and gazelle) and large predators (African wild dog, lions, leopards, cheetahs, crocodiles and two species of hyena). The country is also a major staging post and destination for avifauna migrating south during the boreal winter. Well known avifauna include vultures, raptors, ostrich, bustards, cranes and storks. The high turnover of biodiversity across the landscape presents a challenge to conservation managers, as large areas need to be managed to conserve a bio-geographically representative sample of biodiversity.
27. Five high forest systems exist in Tanzania, each containing significant biodiversity and considerable endemism(see Map 1 in Section IV, Part II: Project maps): (i) the Eastern Arc Mountains, part of the Eastern Afromontane hotspot, and geologically ancient, dating back at least 30 million years and possibly 100 million years, have played an important role as refugia for plants and animals, and as centres of speciation over the millennia; (iv) the highlands of the Albertine Rift, also part of the Eastern Afromontane hotspot, are a complex mosaic of mountain forests and montane grasslands. (iii) the Southern Rift Highlands, part of the Southern Rift montane forest-grassland mosaic are a rich repository of montane forest and grassland biodiversity; (iv) the eastern African Coastal Forestsecoregion includes a variety of biodiversity rich habitats close to the coastline, including scrub forest, dry evergreen forest, woodland,
riverine forest, and thickets and (v) the lowland Guinea-Congolian forest that supports representative examples of the forest fauna found further to the West in Central Africa.

## Protected area context

28. Protected Areas (PAs) provide the principal instrument utilised by the Tanzanian Government to conserve the nation's biodiversity heritage.
29. Different categories of PAs exist in Tanzania and have different legal requirements, ownership and tenure. Tanzania's PAs are grouped into seven categories, according to the degree of protection offered to the land and wildlife. These are (in order of greatest to least protection): National Parks (NP); Forest Nature Reserves (FNR); Game Reserves (GR); Forest Reserves (FR); Conservation Areas (CA);Partial Game Reserves (PGR) andGame Controlled Areas (GCA).
30. The national PA system currently includes: 16 National Parks; 5 Forest Nature Reserves; 34 Game Reserves; one Conservation Area (Ngorongoro Conservation Area); 43 Game Controlled Areas and 621 Forest Reserves, which together cover $1,744,900$ hectares, or more than $18 \%$ of the country. In addition, thereare 14 Wildlife Management Areas (WMA),three Biosphere Reserves ${ }^{8}$ and several hundred Village Forest Reserves (VFR) which foster sustainable natural resource use, and act as dispersal areas for wildlife. Collectively, these conservation areas cover about $27 \%$ of the country's land surface area (almost 250,000 $\mathrm{km}^{2}$ ).
31. Tanzania has seven sites designated as UNESCO World Heritage Sites (WHS):three cultural -the Ruins of KilwaKisiwani/Ruins of SongoMnara; Zanzibar Stone Town; and Kondoa paintings - and four natural - Ngorongoro Conservation Area; Serengeti National Park;Selous Game Reserve; and Kilimanjaro National Park.A serial nomination for nine of the Eastern-Arc Mountain (EAM) forests (including all gazetted FNRs) to be inscribed as World Heritage Site was submitted to the World Heritage Convention in 2010, butwas withdrawn in 2011by the Government of Tanzania.

## Forest Reserves and Forest Nature Reserves

32. The Forest Act ( 14 of 2002) provides for four types of forests:
(i) National Forest Reserves (NFR) ${ }^{9}$ managed by Central Government which consist of: NFRs managed for protection (such as catchnent forests); NFRs managed for production (such as plantations, mangroves or some miombo woodland reserves); Forest Nature Reserves (FNR) managed for conservation; and Forests on general lands which are managed by central government.
(ii) Local Authority Forest Reserves (LAFR) ${ }^{10}$ which are reserved by local government and consist of: LAFRs managed for protection (such as catchment forests); and LAFRs managed for production (plantation and natural forests).

[^3](iii) Village Forest Reserves (VFR) which consist of:Village Land Forest Reserves (VLFR); Community Forest Reserves (CFRs); and forests which are not reserved, are on village land and of which the management is vested in the Village Council.
(iv) Private Forests which are:forests on village land held by one or more individuals under a customary right of occupancy; or Forests on general or village land of which the rights of occupancy or a lease have been granted to a person or persons or a partnership or a corporate for the purpose of managing the forest.
33. 'Forest Reserves' fall under the legal authority of central government (NFRs), District Councils (LAFRs) or village government (VLFRs and CFRs). Most of the Forest Reserves are owned and managed by the central government, through the Tanzania Forest Services (TFS). About 600,000 ha of Forest Reserves are under the ownership and management of local government. Approximately 2 million ha of Forest Reserves fall within existing National Parks and Game Reserves, and are managed by Tanzania National Parks (TANAPA) or the Wildlife Division (WD) of the Ministry of Natural Resources and Tourism (MNRT) respectively.
34. Around 1.6 million ha of Forest Reserves are conservedand managed as catchment forests, with the primary objective of regulating water-flow, preventing surface run-off and soil erosion and providing water for drinking, power supply, industries and irrigation schemes ${ }^{11}$.
35. TheForest Nature Reserve (FNR) categoryof NFR offers the highest level of protection under the Forest Act. FNRs are state owned and managed, and no extraction of woody or animal species is allowed ${ }^{12}$. Activities in FNRs are generally restricted to research, education and low impact nature-based tourism.
36. To date, five FNRs - Amani (8,380ha); Uluguru (24,115ha); Kilombero (134,511ha); Nilo (6,225ha); and Rungwe ( $13,652 \mathrm{ha}$ ) - have been formally proclaimed. Of these, one - Rungwe - is however not yet fully operational ${ }^{13}$. The table below provides a brief overview of the geography and vegetation of each of the five proclaimed FNRs. A more detailed description of the proclaimed FNRs is appended in Section IV. Part VII.

Table 2: Geography and Vegetation of the Proclaimed FNRs

| FNR | Size <br> (ha) | Gazette | Geography | Vegetation |
| :---: | :---: | :---: | :--- | :--- |
| Amani | 8,380 | GN 151 and <br> 152 of 1997 | Altitude ranges from $300-1,128 \mathrm{~m}$ <br> (Kimbo Peak), with a central plateau <br> having a mean altitude of 930 m . The | The two main forest types are semi- <br> deciduous forests in the lowlands, <br> particularly Mnyuzi Scarp with its <br> lower rainfall, and tall luxuriant |
|  |  |  | western side borders Lwengera <br> Valley and rises sharply from <br> lowlands at $150-300 \mathrm{~m}$ to form rocky <br> escarpments, such as Mnyuzi Scarp. | submontane evergreen forests in the <br> mountains above 750 m, where <br> rainfall is higher and the largest <br> Amani is the largest forested block <br> within the East Usambara Mountains |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

[^4]| FNR | Size <br> (ha) | Gazette | Geography | Vegetation |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | and occupies the southern extremity of these mountains. The catchment is drained by Zigi River and its tributaries, which supplies water to Tanga Town as well as Hale and Pangani hydropower stations in the Lwengera Valley. | bushland ( $2 \%$ ), grassland, barren rocky area and waterbodies (all < $1 \%$ ). <br> Dense sub-montane forest covers about half and dense lowland forest about one third of the Nature Reserve. |
| Uluguru | 24,115 | $\begin{aligned} & \text { GN } 296 \text { of } \\ & 2008 \end{aligned}$ | Altitude ranges from 600 ml (Bunduki Gap) - 2,638 m (Kimhandu). <br> The reserve forms part of the Uluguru Mountains and provides an important watershed for tbe Ruvu river (which supplies water to Dar es Salaam). | The vegetation comprises sub montane (below $1,500 \mathrm{~m}$ ), montane ( $1,600-2,400 \mathrm{~m}$ ) and uppermontane (above $2,400 \mathrm{~m}$ ) forests, as well as grassland withswampy areas atLukwangule Plateau, and Kimhandu and Lupanga peaks. |
| Kilombero | 134,511 | $\begin{aligned} & \text { GN } 182 \text { of } \\ & 2007 \end{aligned}$ | Altitude ranges from $1,040-2,600 \mathrm{~m}$ (Nyumbanitu Peak). The Nature Reserve occupies the middle portion of the Udzungwa Mountains, lying between Udzungwa Mountains National Park and Udzungwa Scarp Forest Reserve. It comprises a highly undulating chain of mountains that descend to the lowlands and meet the wetlands of Kilombero Valley, one of Tanzanian's primary agricultural areas and a Ramsar site. | In upland areas, the vegetation comprises moist and dry montane, upper montane forest with some patches of bamboo and upland grassland. In the drier, lower-lying areas, there is lowland forest, some of which has been replaced by woodland and grassland. |
| Nilo | 6,225 | $\begin{aligned} & \text { GN } 234 \text { of } \\ & 2007 \end{aligned}$ | Altitude ranges from 400-1,506m. There are two main peaks: Nilo ( $1,506 \mathrm{~m}$ ) in the north-west and Lutindi ( $1,400 \mathrm{~m}$ ) to the south west. The reserve lies in the north-west part of the East Usambara Mountains. Nilo is a Y-shaped ridge system, with an eastern arm that lies close to Semdoe Forest Reserve and a western arm that looks across the Lwengera Valley to the West Usambaras. A central ridge runs along its southern leg. | The main vegetation types are: dense montane forest above $1,250 \mathrm{~m}$, sub-montane forest at $850-1,250$ m and lowland forest below 850 m . The sub-montane forest can be exceptionally tall and luxuriant, with the largest trees reaching 58 m in height in favourable sites. |
| Rungwe | 13,652 | $\begin{aligned} & \text { GN } 386 \text { of } \\ & 2009 \end{aligned}$ | The topography varies from hilly to steeply dissected, with elevation ranging from $1,500-2,981 \mathrm{~m}$ at the sumnit provides a crucial watershed for the Usangu basin, the Great Ruaha River - headwaters to the | The reserve comprises inontane and upper-montane forest, bamboo and montane grassland, and smaller patches of bushland and heath at higher elevations. |


| FNR | $\begin{aligned} & \hline \text { Size } \\ & \text { (ha) } \\ & \hline \end{aligned}$ | Gazette | Geography | Vegetation |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Ruaha National Park, to Mbeya and Iringa regions. The mountain (linked to the Kitulo-Livingstone range) provides waters to the entire Kyela Valley and its cocoa, banana, coffee and tea industries. |  |

37. A further six sites representing centers of high biodiversity and endemism - Chome ( $14,283 \mathrm{ha}$ ), Magamba (9,283ha), Mkingu (23,388ha), Uzungwa Scarp (32,763ha), Rondo Plateau (14,000ha) and Minziro (25,000ha) - have been proposed for proclamation as FNRs. Of these, one - Rondo Plateau - has significantly advanced the process of formal proclamation and is currently being operationalized in anticipation of its declaration as a FNR. A further three sites - Chome, Magamba and Mkingu - are partially operationalized in anticipation of their future declaration as FNRs, although the process of drafting a Declaration Order has not yet been completed. The table below provides a brief overview of the geography and vegetation of each of the additional six sites that have been proposed for proclamation as FNRs.

Table 3: Geography and Vegetation of the 6 Sites Proposed for Proclamation

| Proposed FNR | Size <br> (ha) | Geography | Vegetation |
| :---: | :---: | :---: | :---: |
| Chome | 14,283 | Altitude ranges from 1,250-2,463 m (Mt Shengena, the highest peak of South Pare). Chome lies on the highest ridges and plateau of the ancient crystalline South PareMountains. The Reserve has a high catchment value due to the high rainfall and itsextensive forest cover. | Main vegetation types are submontane, montane and upper montane forest. Montane forest occurs above $1,500 \mathrm{~m}$, with a drier type on lower slopes and rain shadow areas, and a wetter type covering about $60 \%$ of the Reserve mainly on eastern and western slopes of valleys at $2,000-2,300 \mathrm{~m}$. Mosscovered upper montane forest occurs above $2,300 \mathrm{~m}$, with elfin forest on the highest ridges. Primary heath occurs along rocky ridges in shallow, acidic soils, while secondary heath and grassland have colonized large areas between $1,600 \mathrm{~m}$ and $2,000 \mathrm{~m}$ in drier montane forest that have been subject to fires. |
| Magamba | 9,283 | Altitude ranges from $1,650 \mathrm{~m}$ to the peak of Kwahondo at some $2,300 \mathrm{~m}$. The land drops sharply to the west of Shume on the edge of West Usambara scarp. | Comprises sub-montane and upper montane forests, wetter than those of the Pare Mountains further to the west. Dry montane forest occurs inthe northern and western portions of Shume. Other vegetation types include grasslands and shrublands. |
| Mkingu | 23,388 | Altitude ranges from $380-2,140 \mathrm{~m}$ (Maskati peak). The landscape is undulating, with sharp broken mountains and some very steep terrain. Peaks include Mkindo and Mndela. | There are seven vegetation types occurring in Mkingu: lowland rain forest, sub-montane forest, montane forest, upper montane forest, drier-montane forests, heath and miombo woodlands. |


| Proposed FNR | Size <br> (ha) | Geography | Vegetation |
| :---: | :---: | :---: | :---: |
| Uzungwa Scarp | 32,763 | Altitude ranges from $300-2,068 \mathrm{~m}$. Uzungwa Scarp covers the steep eastfacing Udzungwa escarpment and part of the undulating upland plateau. The southern boundary is the Chita River, the northern boundary the Kidete River and the western boundary the Ruaha, Iwolo and Lukosi rivers. | Comprises lowland, submontane and montane forests, with areas of seasonally inundated mbuga grassland and grassland with bushes. Lowland forests are relatively dry and have a low, often broken canopy with woodiand species except near streams. Submontane forests are well developed, though they have dry forest species on the ridges. Much of the montane forest on the plateau above the scarp is secondary, and may have been cultivated in the historical past. Extensive stands of bamboo are reported from the western side. |
| Rondo Plateau | 14,000 | Rondo Plateau is among the most extensive and highest massifs in the southeast of Tanzania, rising to an altitude of 900 m . | While Rondo is essentially a typical coastal forest, it contains significant elements more characteristic of montane forest. The upper slopes of the mountain support large areas of semi-deciduous hardwood forest. |
| Minziro | 25,000 | Altitude ranges from 1,125$1,140 \mathrm{~m}$.The general area is flat with small rocky outcrops. Minziro village is situated on a hill in the centre of the reserve. | Minziro is the largest forested area in northwest Tanzania and is essentially an outlier of the Guinea-Congo lowland swamp forests. A few kilometres to the south, the vegetation changes dramatically to seasonally flooded grassland with pockets of woodland and papyrus on the river edge. |

38. It is envisaged that the future network of FNRs will eventually cover a total area of $305,000 \mathrm{ha}$,distributed across 11 key sites (see Map 2 below).The individual sites have been selected following a two-step strategic planning process: the first for the Eastern Arc Mountains ecoregion held at Amani FNR in 2005; and the second, for the three other representative areas of high forests, held in Kibaha in 2007. All high biodiversity forest ecoregions in mainland Tanzania now have at least one FNR (either gazetted or proposed for gazettal). A systematic approach was employed during the planning process that aimed to define those reserves that were so biologically valuable that they needed to be given maximum protection. Selection criteria vary from site to site but included: to preserve habitats, ecosystems and species in as undisturbed a state as possible; to maintain genetic resources in a dynamic and evolutionary state; to maintain established ecological processes; and to provide scientific research opportunities.All 11 FNR sites are identified as: Key Biodiversity Areas (KBAs);Important Bird Areas (IBAs) and Important Plant Areas (IPAs). Four sites are also Alliance for Zero Extinction sites and eight form part of a proposed serial nomination for inscription of the Eastern Arc Mountains forests as a World Heritage site.


Map 2: Distribution of the network of current and proposed (Forest) Nature Reserves (shown in black) on mainland Tanzania

## Forest governance - Participatory Forest Management

39. While the Forest Act (2002) states as its intent, '... to delegate responsibility for the management of forest resources to the lowest possible level of local management consistent with the furtherance of national policies' it does not make explicit provision for Participatory Forest Management (PFM). The Act rather supports the implementation of PFM approaches in two ways: (i) enabling local communities to declare and gazette Village, Group or Private Forest Reserves; and (ii) allowing communities to enter into agreements with government and other forest owners for joint forest management agreements.
40. Tanzania is currently promoting two different inodels of PFM:
41. The first model, Community-Based Forest Management (CBFM), is one where rural communities have well defined and legally enforceable rights to own, manage and benefit from forest and woodland resources within their local areas, through the establishment of village forests (i.e. Village Land Forest Reserves, Community Forest Reserves or Private Forests). The Village Land Act No. 5 (1999), the Local Government Act No. 7 (1982) and the Forest Act No. 14 (2002) provide the legal basis for villages and or individuals or group of individuals to own and manage forest resources on village and private land. The rights and responsibilities of local level forest managers under CBFM are clear and unambiguous. Under CBFM villagers, individuals or groups retain all rights to use, harvest and sell forest products within their forest reserve in line with their approved forest management plan. Most of the costs and benefits relating to management and utilization are canied by the owner. The role of central government is minimal (Districts only have a role in monitoring). In return, owners (be it villages, individuals or group of individuals) must demonstrate the ability to manage and protect their forest over the long term, and to the benefit of local people. Many studies conducted over the past decade in Tanzania all point to the fact that when rights and responsibilities are fully devolved, the incentives ${ }^{14}$ appear to be sufficient for communities to invest in forest restoration and their long term management.
42. The second PFM model, Joint Forest Management (JFM), is one that takes place on "reserved land" - land that is owned and managed by either central or local government. Villagers typically enter into management agreements to share benefits and responsibilities for the management with the forest owner. Thus, communities living around the forest enter into Joint Management Agreements (JMAs) with either central or local government regarding the use and management of the forest. Under JFM arrangements, each village defines an area within the forest that it will jointly manage with government. Such areas are called Village Forest Management Areas (VFMAs). To date, only a limited number of JMAs have been signed by the government ${ }^{15}$, particularly those relating to NFRs. These is largely due to the fact that the law is not yet clear on how the benefits of forest management, particularly in forest reserves managed for timber production purposes, can be equitably shared with participating communities ${ }^{16}$. The evidence that JFM results in improved forest condition in Tanzania appears to be mixed. Research carried out to date would indicate that in some areas JFM appears to be working as an effective management tool with which to restore and sustain forest condition while in others it appears to be little better than when managed exclusively by the state.
43. The table below summarises thestate of coverage of CBFM and JFM across mainland Tanzania in 2012 (TFS, 2013):

Table 4: Coverage of CBFM and JFM across mainland Tanzania

| Joint Forest Managenent |  | Comniunity Based Forest Management |  |
| :---: | :---: | :---: | :---: |
| Area of forest covered by JFM management arrangements | 5,392,095 ha | Area of forest covered by CBFM arrangements | 2,366,693 ha |
| Number of villages with signed JFMs | 224 | Number of villages with CBFM | 513 |

[^5]| Joint Forest Management |  | Community Based Forest Management |  |
| :---: | :---: | :---: | :---: |
|  |  | established |  |
| Number of villages with JFMs in process of being established | 828 | Number of villages with CBFM in process | 710 |
| Number of National Forest Reserves with JFM | 181 | Number of declared Village Land Forest Reserves | 523 |
| Number of Local Authority Forest Reserves with JFM | 101 | Number of gazetted Village Land Forest Reserves | 71 |
| Primary forest types where JFM has been promoted | Montane, mangrove and coastal forests | Primary forest types where CBFM has been promoted | Miombo, Coastal and Acacia woodlands |
| Percentage of total area reserved by National or Local Government under some form of Joint Management Agreement | 41\% | Percentage of public land forests now under CBFM arrangements | 12.1\% |
| Primary Regions where JFM implemented | Morogoro, Iringa, Pwani, Tanga, Kilimanjaro | Percentage of villages on mainland Tanzania that are engaged in CBFM activities | 11.7\% |
| Number of districts where JFM is implemented | 65 | Number of districts where CBFM is implemented | 69 |

## Institutional context -Forest Nature Reserves (FNR)

44. The Division of Environment(DoE) in the Vice President's Office (VPO) has overall responsibility for the coordination of national and international matters related to environmental management. The Division of Environment- led by a Director -comprises three Sections: Environmental Natural Habitats Conservation; Environmental Management of Pollution; and Environmental Impact Assessment (EIA). The coordination of biodiversity management - including forest biodiversity - falls within the mandate of the Environmental Natural Habitats Conservation section.
45. The Ministry of Natural Resources and Tourism (MNRT) has the responsibility for overseeing themanagement of all natural, cultural and tourism resources in Tanzamia. The Forest and Beekeeping Division(FBD) within the MNRT is in turn directly responsible for the development of forest policy, laws and regulations and supervising their implementation in the forestry sector.
46. The Tanzania Forest Service (TFS) Agency is an executive agency (in terms of the Executive Agencies Act Cap 245, through the Establishment Order GN 269 of July 2010) that is mandated with the establishment and management of national Forest Reserves (both natural and plantations), bee reserves and forest and bee resources on reserved land. According to the Establishment Order, TFS owns all central government forest reserves (including mangrove forests, nature reserves, catchment forests, coastal forests, productive forest reserves and proposed bee reserves), an area of $\sim 15$ million ha. The agency also manages 15 industrial plantations (194,072ha), of which $90,000 \mathrm{ha}$ are planted.
47. TFS is headed by a Chief Executivewho is currently assisted by three acting Directors, 4 acting Heads of Units and seven acting Zonal Managers (see organogram in Figure 1 below). The Chief Executive, Directors and Heads of Units constitute the 'management team' of the Agency. The
management team is responsible for providing strategic direction and technical and professional support to the zonal offices.


Figure 1: Organisational structure of the TFS Head Office
48. The operational management of government Forest Reserves is devolved to the sevenZonal Offices, each headed by a ZonalOffice Manager (see organogram of the Zonal Office in Figure 2 below). The Zonal Office Manager reports directly to the Chief Executive. Each zone is spatially divided into a number of districts, each district headed by a District Manager reporting to the Zonal Office Manager.


Figure 2: Organisational structure of the TFS Zonal Offices
49. Each Forest Nature Reserve located within one of the 7 Zonesis typically headed by a Conservator, reporting directly to the Zonal Office Manager ${ }^{17}$. The FNR operational and administrative staff complement, reporting to the Conservator, usually includes a team of Forest Rangers, Law Enforcement and Administrative staff.Each FNR is divided into 'ranges' that are then controlled by Forest Rangers. The Forest Rangers assist and report to the Conservator on conservation and enforcement issues related to his/her range. In order to enable the Forest Rangers discharge their duties properly, Rangers' Posts are constructed within or close to their ranges. These posts provide space for an office, and some facilities for accommodation and storage. Each FNR works to a defined set of action plans, work plans and budgets, defined on an annual basis in June-July.
50. The TFS has a current total staff complement of 1,584 staff, of which approximately 104 are committed to the direct management of FNRs.
51. There are a number of technical level institutions that undertake forest-based research on behalf of the government.The Tanzania Forestry Research Institute (TAFORI) is a National Institution (established by Act 5 of 1980) whose primary mandate is to conduct, co-ordinate and promote forestry-based research activities and to document and disseminate the results ofthis research. Its Head Office is in Morogoro, with seven research centres located in different ecological zones of the country (Dodoma Arid Zone Afforestation Research Centre; Kibaha Lowland Afforestation Research Centre; LushotoSilviculture Research Centre; Malya Lake Zone Afforestation Research Centre; Moshi Timber Utilization Research Centre; Mufindi Pulpwood Research Centre; and TaboraMiombo Woodland Research Centre).The Tanzania National Tree Seed Centre (TTSC) based in Morogoro hosts a professional botanist and experts in the cultivation and storage of seeds from native and exotic tree species. The Tanzania Wildlife Research Institute located in Arusha undertakes targeted research in the field of wildlife conservation in Tanzania.
52. Tanzania also has a number of higher education institutions that provide training in forest conservation and management. There are three Universities and a number of technical training institutions,

[^6]including: Sokoine University of Agriculture (Faculty of Forestry and Nature Conservation) in Morogoro; University of Dar es Salaam; College of African Wildlife Management on the slopes of Mt Kilimanjaro;Olmotonyi Forestry Training Institute near Arusha; and the Forestry Industry Training Institute in Moshe.
53. A large number of international and national environmental and conservation NGOs have been, or are currently directly involved in, forestry conservation initiatives in Tanzania. These include: Tanzania Forest Conservation Group (TFCG); Fauna and Flora International (Tanzania); Wildlife Conservation Society (WCS); Wildlife Conservation Society of Tanzania (WCST); World Wildlife Fund -Tanzania Country Office (WWF-TCO); IUCN East Africa Regional Office (IUCN-EARO); Mitandao ya Jamii ya Usimamizi wa Misitu Tanzania (Community Network in Forest Conservation in Tanzania) (MJUMITA); Mpingo Conservation and Development Initiative (MCDI);Natural Forest Resources Management and Agroforestry Centre (Tanzania); CARE (Tanzania); African Wildlife Foundation (Tanzania); Jane Goodall Institute; and theTanzania Natural Resource Forum.
54. Development partners providing funding, development and technical support to the conservation of government Forest Reserves (including FNRs) include: Royal Norwegian Government; DFID; FAO; UNEP; Government of Finland;GIZ; USAID; UNDP; DANIDA; World Bank, EU, World Land Trust and JICA. The Development Partners Group (DPG), established in 2004, currently includes 17 bilateral and 5 multilateral development agencies. The collective approach of the DPG to management aid in Tanzania is guided by the Joint Assistance Strategy (JAST).

## Policy and Legislative context -Forest Nature Reserves

55. Major policies and their respective legislation, that have a direct bearing on sustainable forest management include, inter alia: the National Environment Policy; the Environment Management Act; the Land Policy; the Land Act; and the Village Land Act.
56. The National Environment Policy (NEP, 1997) articulates the relationship between poverty and environmental degradation, and identifies six major environmental problems for urgent attention: (i) land degradation; (ii) lack of accessible good quality water for both rural and urban inhabitants; (iii) environmental pollution; (iv) loss of wildlife habitats and biodiversity; (v) deterioration of aquatic systems; and (vi) deforestation. It seeks to strengthen the mainstreaming of environmental management into other sectors, including: agriculture; livestock; water and sanitation; health; transport; energy; mining; human settlement; industry; tourism; wildlife; forestry; and fisheries.
57. The Environmental Management Act (EMA, 2004) provides the legal and institutional framework for the sustainable management of environment and natural resources in the country. It clarifies the environmental management mandates of the national, regional and local level institutions, civil society, private sector and other stakeholders. It also defines key environmental planning and management tools and provides for environmental quality standards, economic instruments, and meeting of international obligations.
58. The overall aim of the Land Policy (1995) is to promote and ensure a secure land tenure system, encourage the optimal use of land resources, and facilitate broad-based socio-economic development without endangering the ecological balance of the environment. The relevant objectives and goals of the National Land Policy are: (i) village Councils shall administer Village Lands in consultation with Village

Assemblies; (ii) the government will assist villages in demarcating their boundaries and implementing their management authority over these lands; (iii) Village Land Use Planning will be simplified for speedy execution; and(iv) government will ensure that permits and licenses for natural resources exploitation will be made with regard to land use polices and envirommental and conservation policies.
59. The Land Act (1999) and the Village Land Act (1999) empower village governments with the devolution of management riglits over land. It enables villages to draft and enforce bylaws ${ }^{18}$. It allows for the creation of Certificates of Village Land and the Right of Occupancy to Forest Land for both communities and individuals. Finally, it establishes management institutions for Community Based Natural Resource Management (CBNRM) and Community-Based Forestry (CBF) at village level (like Village Assembly, Village Council, Village Environment Committee, Village Natural Resource Management Committee and Village scouts or guards). The Act makes legal provision for common property to be registered as statutory entitlements in Customary Lands.
60. The Land Use Planning Act (2007) provides for a village government to develop and adopt a land use plan, for vetting by the village assembly. Once the land use plan has been vetted, the village can then begin to implement the plan without further approvals or delays.
61. Several major policies to support Forest Management in Tanzania have been developed over the past decade. Foremost are the Forest Policy $(1998)^{19}$ - which was operationalised through the Forest Act (2002) -and the National Forest Programme (NFP, 2001) ${ }^{20}$. These policy and legal documents have been accompanied by regulations and guidelines, including a major effort to involve communities in forest management through the promotion of Participatory Forest Management across both Forest Reserves and forest on village lands.
62. In line with the Forest Policy, the Forest Act and the Village Land Act, the Ministry of Natural Resources and Tourism has issued draftGuidelines for Community-Based Forest Management (2001) ${ }^{21}$ to provide practical guidance to its staff and to district and village authorities for implementation. The guidelines make clear that the target population for community-based forest management are residents living within and adjacent to the forest domain. The establishment of joint management committees (village and sub-village level) and joint management agreements are also promoted.
63. The Tanzania Forest Service Agency Strategic Plan (2010-2013) ${ }^{22}$ aims to contribute to national social and economic development goals by: (i) enhancing the management and conservation of forestand bee resources; and (ii) increasing the contribution of the forest and bee keeping sector to the national GDP.
64. Other key sectoral policies, strategies and legislation directly affecting forest management include inter alia:

Table 5: Legislation affecting Forest Management in Tanzania

| Legislation | Date | Brief description |
| :--- | :--- | :--- | :--- |
| National Policy <br> for Tourism | 1991 | Through its objectives, the tourism policy identifies the need to: involve local <br> people in wildlife conservation through improving local tourism; improve |

[^7]| Legislation | Date | Brief description: |
| :--- | :--- | :--- |
| National <br> Agriculture and <br> Livestock Policy | 1997 | protection of tourist attractions; improve safari (tourist) hunting; and improve <br> publicity. |
| The policy advocates the allocation of land for agricultural development <br> should be on a long-term basis, with a minimum tenure of 33 years. Village <br> title deeds should in practice be permanent, and title deeds should be <br> provided to land users. |  |  |
| Management <br> Area Regulations | 2002 | Allows the Minister of Natural Resources and Tourism to declare land set <br> aside by a village government as a Wildlife Management Area (WMA). <br> Participation in the use and management of WMAs is realised through <br> Community Based Organisation (CBO) and/or village governments. |
| National Energy <br> Policy | 2003 | Provides a policy framework for addressing the biomass energy needs <br> (particularly charcoal and fuel wood) of inore than 90\% of the population. |
| Rural Energy Act | 2005 | Provides the legal framework for addressing rural energy needs through the <br> diversification energy sources as a way of reducing over dependence on <br> biomass energy and therefore reduce pressure of forest resources |
| Water Resources <br> Management Act | 2009 | Provides for the institutional and legal framework for the management and <br> development of water resources. It vests ownership of water resources in the <br> President (as trustee) and puts in place mechanisins for harvesting and using <br> water. It provides for the establishment of a National Water Board and <br> catchment-specific Basin Water Boards. |
| Wildlife <br> Conservation Act | 2009 | Defines wildlife protected areas, their establishment, management and <br> imposed restrictions. The Act focuses on Game Reserves, Wetland areas, <br> Wetland reserves and Game Controlled Areas but also deals with protection <br> of wildlife corridors, dispersal areas, buffer zones and migratory routes. |
| guidelines |  |  |
| for Growth and |  |  |
| Reduction of |  |  |
| Poverty |  |  |$\quad 2009$| Provides guidelines on, and recommendations for, preventing the negative |
| :--- |
| impacts of biofuel production on natural forests |

65. In 2009, Tanzania embarked on the road towards REDD+ by formulating a national framework to guide the development of a REDD+ Strategy. Tanzania was supported by the UN-REDD programme (US $\$ 4.3$ million) and the Royal Norvegian Government (US $\$ 80$ million) to prepare the national strategy and action plan for implementation of the REDD+ activities including institution strengthening/set up as well as development of REDD demonstration projects. The UN-REDD Programme is a collaborative partnership between the United Nations Food and Agriculture Organisation (FAO), the UN Development Programme (UNDP) and the UN Environment Programme (UNEP) and seeks to assist Tanzania to prepare and implement a national REDD+ strategy as part of the REDD readiness phase.
66. Progress with REDD+ to date includes: (i) the development and implementation of 9 pilot projects; (ii) preparation and approval of the National REDD+ Strategy (2012); (iii) the process of establishing a national Carbon Monitoring Center; (iv) capacity building and technical support for developing a national

Monitoring, Reporting and Verification (MRV) system; (iv) the process of establishing a national REDD Trust Fund; (v) development of REDD+ Social and Environmental Safeguards and Standards and (vi) the dissemination of information of REDD+ and awareness-raising.
67. Tanzania is also part of the World Bank Forest Carbon Partnership Facility (FCPF), but does not currently receive any funding from it because the readiness phase is already funded by other programmes (i.e. the Royal Norwegian Government and UN-REDD). FCPF membership is a way for Tanzania of keeping up-to-date with international REDD+ policy and to learn from other partnership members. For the FCPF, Tanzania has submitted a Readiness Plan Idea Note (R-PIN) in 2009, followed by a REDD Readiness Preparation Proposal (R-PP) in 2010. Tanzania has also developed and approved its national REDD+ Strategy Plan in June 2012 and its Action Plan in July 2012.
68. The initial period 2009-2011 for UN-REDD support has been extended twice: once until June 2012 and then for an additional year until 2013. In addition, with support from the Government of Finland and of the FAO, Tanzania has undertaken a comprehensive country-wide forest inventory through the National Forest Resource Monitoring and Assessment programme (NAFORMA). NAFORMA has collected significant social and biophysical data at the district level, and this data is providing crucial inputs into both the National REDD+ Strategy and the national MRV processes especially in the establishment of the baseline and reference emission levels.
69. The first phase of the UN-REDD support programme, and the linked NAFORMA project, should be completed in early 2014.

## Threats, Root causes and Impacts

70. Despite the government's efforts, Tanzania's forests and the biodiversity that they contain are still under considerable threat, with an average of $1 \%$ of the forest area being lost every year ${ }^{23}$.
71. Direct threats to the forests include clearance for subsistence agriculture, charcoal production, timber extraction and wildfires. In recent years, additional pressures have emerged, including the threat of mining (e.g. for alluvial gold) and clearance for biofuels (e.g. planting of Jatrophacurcas, palm oil, sunflowers or sugarcane). A prioritised list of direct threats - in terms of their area (extent), importance (severity) and required actions (urgency)- is summarised below (adapted from the Eastern Arc Strategy, 2009):

Table 6: Threats to Forests - Severity, Extent and Urgency

| Threat | Extent | Severity | Urgency $^{\prime 2}$ | Total $^{24}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Uncontrolled fire | 10 | 9 | 10 | 29 |
| Conversion of natural habitats to agriculture | 9 | 10 | 9 | 28 |
| Illegal logging | 7 | 7 | 6 | 20 |
| Unsustainable collection of firewood and building materials | 8 | 6 | 7 | 21 |
| Inappropriate mining practices | 1 | 8 | 8 | 17 |

[^8]| Unsustainable hunting/poaching | 6 | 5 | 4 | 15 |
| :--- | :---: | :---: | :---: | :---: |
| Unsustainable collection of medicinal plants | 5 | 3 | 2 | 10 |
| Unsustainable collection for the pet trade | 3 | 1 | 3 | 7 |
| Invasive species | 2 | 2 | 1 | 5 |

72. Clearing of land for agricultureconstitutes one of the main drivers of deforestation in mainland Tanzania.Because the soil quality is poor and can only support small-scale subsistence agriculture, most agricultural development involves short-term shifting cultivation, concentrating on food crops like cassava, maize, sorghum, millet and rice. The effects of drought, flooding and/or soil erosion, accompanied by an increasing loss of soil fertility, is leading to declining productivity of arable crop fields forcing small-scale farmers to further encroach into adjacent forest and woodland areas in search of alternative farmland. Limited agricultural skills and poor farming practices in rural communities further reduce the productivity of cultivated lands. The rural population is increasing at an average rate of $3 \%$ annually, and the concomitant demand for additional farmland is increasing every year.This is further exacerbated by an influx of refugees from neighbouring countries.
73. Uncontrolled burning to clear farmland, to trigger new growth for livestock grazing, to drive animals for hunting, to collect honey (smoke is used to drive bees from their hives) and to reduce populations of tsetse flies and ticksis also threatening forests, often replacing rare, endemic forest species with more common wide-ranging fire-adapted species. The risk of the outbreak of destructive forest wildfires is particularly intense during the period prior to cultivation, when fires are set to burn trash and clear agricultural fields.
74. Burning of woody plants for charcoal production is causing major habitat loss in areas close to large cities, and alongside main roads. The impact of charcoal production is further exacerbated by the use of inefficient production methodsin the rural areas and inefficient stoves used to burn the charcoal when cooking food in urban areas. Traditionally charcoal producers have practiced selective felling but, due to low intensity of trees per unit area and the increasing demand for charcoal in urban areas, charcoal producers have reportedly resorted to practicing clear felling of some forests. For example, most of the natural vegetation of Forest Reserves on the outskirts of Dar es Salaam has been cleared for charcoal production to meet the ever growing demand for cooking fuel in the city.
75. In areas away from towns and roads, the degradation of forests is largely resulting from the collection of firewood and wood forbuilding materials, and timber. Most of the country's rural population rely on wood fuel for their fuel needs, because alternative energy sources (like kerosene and electricity) are much more expensive and/or unavailable.
76. The total demand for wood (including firewood, charcoal, building materials and timber) in mainland Tanzania is currently estimated at about 87 million $\mathrm{m}^{3} /$ annum (NAFORMA, 2013). However, total annual growth of trees on the mainland is only about 113 million $\mathrm{m}^{3} /$ annum. Of this total annual growth, about $57 \%$ ( $\sim 65$ million $\mathrm{m}^{3} /$ annum) is located outside the protected forest areas. Assuming then that all the wood is harvested from the unprotected forests; this still means that there is a wood deficit of about 22.5 million $\mathrm{m}^{3} /$ annum (see Figure 3 below). This deficit is placing the forests within protected forests (including the FNRs) under increasing pressure (for fuel wood in particular) from adjacent communities.

## Yearly wood deficit



| Cultivated land (protected areas) | Allowable cut | 64.750 mill m3 |
| :---: | :---: | :---: |
| Grassland (protected areas) | Consumption | 87,250 mill m3 |
| Bushland and thicket (protected areas) | Deficit | 22,500 mill m3 |
| i Woodland (protected areas) |  |  |
| melantations (protected areas) |  |  |
| BForest (protected areas) | Key message: <br> Consumption exceeds legally available growth by $1 / 3$ and gap is growing. |  |
| Cultivated land |  |  |  |
| Grassland |  |  |  |
| Bushland and thicket | Other human factors (fire etc.) and natural loss increase the deficit. |  |
| EWoodland |  |  |  |
| BPlantations |  |  |  |
| - Forest | Legally available resources are not sufficient. <br> Protected areas are at risk. |  |

Figure 3: Annual wood deficit in Tanzania
77. Illegal loggingis being driven by a very high demand for specific, targeted timber tree species.In the North and South Pare Mountain forest blocks, illegal harvesting of camphor (Ocoteausambarensis) and Podocarpususambarensis is high. In the west (Kigoma, Rukwa and Tabora Regions), the Miombo woodlands have been overharvested to the extent that most of the dominant miombo species (e.g. Jubernadia, Brachystergia, Commiphora, Pterocarpusangolensis, Barphiakirkii and Swartziaspecies) are now locally extinct. In the Southern regions (Lindi and Mtwara, including forests in Bagamoyo, Kisarawe, Mkuranga and Rufiji Districts in the Coast Region as well as those in Handeni, Kilindi, Mkinga and Muheza Districts in Tanga Region), most of the valuable timber species - including Dalbergiamelanoxylon ('Mpingo'), P.angolensis, M. excelsa, B. kirkii, Afzeriaquansensis ('Mkongo') and Brachystergia and Julbernadia species - are under heavy logging pressure. Recent data (NAFORMA, 2013) suggests that about $26 \%^{25}$ of the illegal wood cutting is taking place in protected forest areas.
78. Bush-meat hunting has in some areas - such as the Gendagenda Forest Reserve in Handeni district, Uzungwa Scarp Forest Reserve and the Noto/Chitoa Plateau forests in Lindi region - impacted on large mammal populations (elephant, buffalo, leopard, etc.) to the extent that only smaller species now remain. The main hunting threat to forests is primarily from domestic consumption - for ungulates (e.g. dik-dik, warthog, duiker and bushpig) and primates (e.g. colobus monkey) - rather than external markets. In some instanceendemic species, such as theUdzungwa red colobus in Uzungwa Scarp Forest Reserve, are being hunted to the brink of local extirpation.Some faunal species, such as the endemic three-horned chameleon, are also being illegally captured for the export market.

[^9]79. Destructive mining practices are also negatively impacting areas of forest natural habitat, and associated catchments. Uncontrolled illegal mining for alluvial gold is of particular concern. For example, artisanal gold mining around the national forest reserve of Shengena in Same district (Kilimanjaro region) is resulting in measurably high levels of water pollution (from the chemicals used to extract gold from ores) and felling of trees and shrubs (in the misguided belief that gold was attached to the roots). Similarly, a flood of illegal small-scale artisanal gold miners (up to 40,000 people) are compromising the ecological integrity of the watercourses and wetlands of the East Usambara catchment forest (including the Amani FNR and Balangai FR) in search of alluvial gold. Bauxite extraction from areas adjacent to Shengena (Chome NFR) is leading to serious land degradation. Commercial and small-scale mining for titanium, silica, limestone, iron and manganese on coastal sands is also resulting in the localised destruction of coastal forests.
80. Recent fieldwork in the East Usambaras has suggested thatinvasive alien species (IAS) are a more serious problem than had previously been realised. Aggressively spreading IAS includeinter alia: the Umbrella tree (Maesopsiseminii), an aggressive invader of disturbed forests;Spanish Cedar (Cedrelaodorata), a fast-growingfruit-bearing tree invading forest gaps and disturbed forest areas; Lantana (Lantana camara), a spreading shrub colonising the forest edges of most mountain forests; the Feather Palm (Arengapinnata), a rapidly spreading invasive in forests of the East Usambara; and Blackberry (Rubus sp.), a spreading shrub that is becoming an increasingly serious problem in the forest understory.
81. Illegal harvestingof a number of plant species - such asCather edulis ('Mirungi'), Prumus africana and Sandalwood ('Misandali') for industrial processing - is threatening the ecological viability of local populations. The unsustainable levels of the collection and export of some plant species - such as the endemic African violet (Saintpaulia species) that are largely confined to the Eastern Arc mountains- may even potentially lead, over the long-term, to their extinction. While there is still limited knowledge of the extent, and impact of, the collection of medicinal plants (e.g. Artemesiaafra, Rumexusambarensis and Vernonia sp. for treating malaria; Psidiasp. and Plectranthusbarbatus for fevers; or Ricinuscommunis, VernoniasubligeraCrassocephalumbojeri for stomach problems), it is anticipated that the localised negative impact on populations of the targeted species may be significant.
82. Underlying these threats are however deeper social, political and economic issues including an increasing demand for agricultural and timber products, endemic poverty, weak governance, marginalization of rural communities and women, weak land tenure, andlow levels of political will to conserve forests. Many of the communities living adjacent to these forests are amongst the poorest in Tanzania. High rates of poverty within these communities mean that there is a high dependency on natural resources to meet food, fuel and shelter requirements. In the context of a growing population, a widening division between rich and poor and growing threats from climate change, these issues are liable to result inincreasing rates of deforestation, irreversible biodiversity loss and deeper poverty for forest adjacent communities, particularly women.
83. Tanzania's Initial National Commumicationunder the UNFCCC (URT, 2003) shows that the main consequences of climate changeare a rise in the mean daily temperature (on average, by $3-5^{0} \mathrm{C}$ throughout the country) and a rise in the mean annual temperature (on average by $2-4^{\circ} \mathrm{C}$ ). The report also indicates that there will be an increase in rainfall in some parts of the country, while other parts will experience decreased rainfall. Some areas of northern Tanzania will get wetter (between $5-45 \%$ wetter), whilst others, especially in the south, will experience severe reductions in rainfall (up to $10 \%$ ). This change in rainfall would make the central, western and southern part of the country increasingly unsuitable for

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agricultural production ${ }^{26}$. Climate change projections also indicate that the frequency and severity of extreme climatic events (especially the incidence of droughts and floods) will increase.
84. Forest responses to climate change are uncertain.Highly fragmented forest or species populations will probably be more vulnerable to the effects of climate change. The National Adaptation Programme of Action (2007) forecasts a change to drier forests and ecosystems as a result of climate change. An impact assessment on forest ecosystems predicts that subtropical thorn woodland will be completely replaced, while subtropical dry forest and subtropical moist forest will decline in area by $61 \%$ and $64 \%$ respectively. There will be aconcomitant increase in the cover of tropical very dry forest, tropical dry forest and tropical moist forest. The Forest Gap Model predicts that some species will be more vulnerable to climate change than others, particularly those: (i) that are drought/heat intolerant; with low gernination rates; (ii) with low survival rate of seedlings; and (iii) with limited seed dispersal/migration capabilities.
85. Since many rural communities depend on forests for timber and non-timber forest products, the adverse climate change impacts will significantly reduce the ability of the forests to sustain their livelihoods.

## LONG-TERM SOLUTION AND BARRIERS TO ACHIEVING THE SOLUTION

86. The establishment, and effective management, of a representative nationalsystem of protected areas is an integral part of the country's overall strategy to address the threats and root causes of biodiversity loss.In Tanzania thePA system encompassesa number of sub-networks of different categories of protected areas - designed to conserve wildlife (e.g. National Parks, Game Reserves) and forests (e.g. Forest Reserves, Forest Nature Reserves) - under the management authority of a range of different conservation agencies.
87. A sub-network of Forest Nature Reserves (FNR) - administered by the Tanzania Forest Service (TFS) -has been established to conserve the most biodiversity-rich high forest ecosystems in the country.
88. The long-term solution sought by the Government of the United Republic of Tanzaniafor the subnetwork of FNRsis characterised by:(i) an ecologically representative sub-network of legally secure FNRs that isconfigured to ensure that populations of forest species can persist in the wild; (ii) amandated and fully accountable management institution that is responsible for the efficient and cost-effective management of the sub-network of FNRs; and (iii) individual FNRs within the sub-network of FNRs that are sufficiently staffed, adequately resourced and sustainably funded to achieve their defined management objectives.
89. The main barriersto achieving this long-term solution are outlined below:

## Barrier 1:Management deficiencies in the expansion, planning and operational management of FNRs

90. Amani FNR was proclaimed in 1997. The systematic selection of additional areas proposed for proclamation as FNRs was later completed in 2005. After 2005, the Forestry and Beekeeping Division (FBD) of the MNRT - with support from development partners - undertook the work required to gazette the selected sites as new FNRs. By 2009, four additional FNRs - Uluguru; Kilombero; Nilo; and Rungwe -

[^11]were formally proclaimed. However, despite all the technical and consultative preparatory work already being completed, the process of proclaiming the remaining six targeted areas - Chome, Magamba, Mkingu, Uzungwa Scarp, Rondo Plateau and Minziro - has stalled. The current state of progress in formally declaring these six targeted areas may be summarised as follows:

Table 7: Declaration Status of Proposed FNRs

| Proposed FNR | Stage of Declaration |
| :---: | :---: |
| Rondo Platcau | All the preparatory work for declaring the site as a FNR has been completed, including consultations with the local (ward, district and regional) authorities and adjacent villages. <br> A draft Declaration Order was sent to the Chief Parliamentary Draftsman in the Attorney General's Chambers in September 2013 for vetting. <br> Once yetted, the Declaration Order will be returned to MNRT for the Minister's signature. The signed Declaration Order will then be forwarded to the office of the Attorney General for publication in the Government Gazette. |
| Magamba | All the preparatory work for declaring the site as a FNR has been completed, including consultations with the local (ward, district and regional) authorities and adjacent villages. <br> A draft Declaration Order was sent to the Chief Parliamentary Draftsman in the Attorney General Chambers in September 2010 for vetting. <br> No further progress has however been made since. |
| Chome | All the preparatory work for declaring tbe site as a FNR has been completed, including consultations with the local (ward, district and regional) authorities and adjacent villages. <br> No Declaration Order has yet been drafted. |
| Mkingu | All the preparatory work for declaring tbe site as a FNR has been completed, including consultations with the local (ward, district and regional) authorities and adjacent villages. <br> No Declaration Order has yet been drafted. |
| Uzungwa <br> Scarp | All the preparatory work for declaring the site as a FNR has been completed, including consultations with the local (ward, district and regional) authorities and adjacent villages. <br> No Declaration Order has yet been drafted. |
| Minziro | All the preparatory work for declaring the site as a FNR has been completed, including consultations with the local (ward, district and regional) authorities and adjacent villages. <br> No Declaration Order has yet been drafted. |

91. There is thus a need to expedite and complete the formal declaration processes of the remaining six areas targeted for gazetting as FNRs.
92. The ecological viability of the network of FNRs is being further compromised by the increasing fraginentation of both the existing and proposed FNRs as a result of the unplanned conversion of the immediately adjacent forest, woodiand, savannah and/or wetland areas for shifting cultivation and permanent agriculture. The ongoing biological isolation of these FNRs is affecting faunal movement corridors, reducing dispersal areas, compromising water yields from catchment areas, increasing the risk of erosion, and reducing the viability of species population sizes. While there has been some recent progress in addressing the problem of the fragmentation of FNRs - such as linking the forests of Uluguru through the Bunduki corridor - there is still a critical need to better integrate the FNRs into broader landscape-based land use and conservation initiatives (e.g. linking Kilombero, Udzungwa Mountains NP, Nyanganje FR and Uzungwa Scarp through the Mngeta corridor). Although the MNRT and TFS have recognized the need for this landscape-level approach, implementation is hampered by Tanzania's complex administrative
system. The central government is responsible for establishing policy and ensuring its effective implementation, but the responsibilities for land use planning and management lie with District Administrations. These district authorities have limited capacities to effectively integrate biodiversity planning into their work, and lack both scientific and socio-economic data needed to develop trade-offs between conservation and economic imperatives. The capacity of Districts to regulate unplanned/illegal land conversion is also weak. This problem is further compounded by the inefficient integration of enforcement activities between TFS and the Districts (as well as with other agencies, such as TANAPA). TFS, in turn, also has limited institutional capacity (staff, skills, knowledge) to properly plan and implement a more integrated landscape management approach to complement its forest conservation mandate.
93. A number of FNRs are also spatially proximate to formal protected areas - such as national parks, game reserves or wildlife management areas - which are administered by a number of different conservation agencies, such as TANAPA and the Wildlife Division of MNRT. However, the coordination of planning and management between TFS and these other conservation agencies to achieve landscapescale conservation objectives is still sub-optimal. Improved coordination could significantly improve the long term sustainability of the forest reserves, particularly in some of the smaller isolated FNRs. Better cooperation may also even open up opportunities for rationalising boundaries, establishing spatial corridors and/or sharing resources, capacities and knowledge between institutions.
94. There is currently virtually no institutional capacity within the TFS to provide coordination, strategic direction and specialist/technical conservation support services to the FNR network. Although a small specialised Nature Reserves 'Coordination Unit' located in Morogoro (and linked to the Eastern Arc Mountain Forests Conservation Endowment Fund) previously fulfilled some of these functions on behalf of the FBD, this unit has subsequently been decommissioned and staff redeployed to other functional units in the newly established TFS. In the absence of this coordinating hub, management planning support for FNRs is now primarily delivered through the Zonal Office of the TFS. The implication of this is that there is now no harmonised approach to the overall planning of the network of FNRs, and limited specialist, technical and professional expertise to address the idiosyncratic conservation management needs of the FNRs (e.g. nature-based tourism development; integrated fire management planning; footpath planning and maintenance; integrated IAS management; strategic and annual management planning; applied research; species monitoring; rehabilitation/restoration management). Because the Conservator of each FNR reports directly to theZonal Office Manager (who in turn reports directly to the Chief Executive), there is also little communication with, and collaboration between, the Conservators and staff of other FNRs located in the different Zones.
95. The current staffing complement in the FNRs -many of whom are approaching retirement age -is inadequate to meet the basic in situ operational requirements of the reserves. Key management, technical and professional skills are also not sufficiently represented in the FNR staff complement.The number of technical staff completing forestry and certificate courses at the Forestry Training Institute at Olmotonyi (Arusha) has -due to funding constraints - been declining over the years. The salaries of reserve staff are presently all paid from the state budget, with salary scales based on a very low public service rate of remuneration (average for certificate holders -US $\$ 223 / m o n t h ;$ average for Diploma holders US $\$ 254 /$ month; average for Degree holders - US $\$ 351 /$ month), with negligible benefits. The implication is that experienced, skilled personnel are often difficult to retain within the FNRs. Reserve staffare poorly resourced and equipped to effectively administer the FNRs. Enforcement capability is thus weak as a result
of inadequate numbers, training and equipment, with illegal activities in and around the FNRs consequently poorly regulated. In the absence of regular reserve patrols and maintenance of reserve boundaries, encroachments and illegal harvesting of wood, plant material and bushmeat is becoming increasingly rife ${ }^{27}$. The risk of fires that spread from adjacent farmiands into forests remains largely uncontrolled, while the aggressive spread of IAS - such as Measopsiseminii and Cedrella sp. in Amani; Acacia mearnsii and Eucalyptus spp. in Chome and Magamba; or Pinuspinaster in Rungwe - are not being effectively contained. With the exception of Amani, Kilombero and Uluguru, the remaining gazetted FNRs (Nilo and Rungwe) and the six sites targeted for proclamation currently have inadequate infrastructure (buildings, roads, services) to meet even their rudimentary administrative needs.
96. While Joint Forest Management (JFM) potentially provides for local communities and the government to cooperate and collaborate in the co-management of FNRs, the lack of clarity on the fiscal (or other) incentives ${ }^{28}$ for local communities party to a Joint Management Agreement has seriously undermined the efficacy of this model for FNRs. So, while a number of draft Joint Management Agreements (JMA) ${ }^{29}$ for FNRs have been negotiated between villages and the FBD (the then management authority for FNRs) or TFS, none of these have yet been formalised and operationalized because FBD/TFS do not have adequate funding to finance any fiscal incentives for participating villages. Further, consumptive use in FNRs is highly restricted and tourism use is extremely low (collectively $<1,300$ paying visitors/annum for all FNRs), so almost no revenue is currently generated from the direct use of FNRs for redistribution to participating communities. Local communities thus perceive that there is an imbalance of costs and benefits associated with the conservation of FNRs, based on the fact that local residents are now no longer able to legally use the forest areas -such as hunting, grazing and collecting forest productsor as a source of new agricultural land - but have received nothing in return for these lost opportunities. This is leading to the ongoingillegal exploitation of the natural resources (i.e. wood, logs, plant material and fauna) from FNRs, with little inherent sense of responsibility in surrounding villages for the well-being of these reserves.
97. Amani FNR has however started to point the way towards developing approaches to addressing this inequitable relationship. Here, local communities and the FBD (now TFS) have formalised local use regulations and a revenue-sharing agreement for the FNR in the form of a MOU between reserve management and each affected village government. In terms of the MOU (and associated village byelavs), community members from the village are permitted to collect firewood from the 'local use zone' (comprising about $6 \%$ of the total area of the FNR) twice per week, and to collect medicinal plants with special permission. In return for these restrictions on access, the 'buffer zone villages' then receive $20 \%$ of

[^12]entrance fees, user fees and research fees paid to the nature reserve. Two individuals from the local commmnity - one from each of the 18 villages with MOUs - are also represented on the Amani Nature Reserve Advisory Board. Similar tailor-made approaches need to be tested, developed and implemented for the remaining 10 (both gazetted and proposed) FNRs in the network.
98. The enabling legislative and policy environment for promoting sustainable land and natural resource use practices in, and improving sustainable livelihood options for, local communities living in and around the forest reserves is well developed in Tanzania. A number of pilot projects have successfully demonstrated the effectiveness of these approaches in contributing to the measurable recovery of adjacent forest ecosystems. However the scaling up (in both space and time) of short-term sustainable land use and livelihood pilots has been constrained by inter alia the following: limited in situ capacity (staff, funding and skills) of the responsible public institutions to facilitate, support and enable sustainable land use practices and alternative livelihood initiatives beyond their initial introduction; a lack of meaningful incentives for communities to adopt these alternative land and natural resource use practices over the longer term; continued low levels of awareness prevailing among community members about the need to protect forest resources, and the means to do this; weak cooperative governance mechanisms between the district, villages, community members and forest management authorities to administer any agreed sustainable levels of forest use; poor and inconsistent enforcement of existing laws and regulations against forest degradation and deforestation by the responsible public institutions; and a lack of political will (at the village, district and national level) to protect forest resources, due to conflicting sectoral interests.

## Barrier 2: Insufficient funding allocated for improving the management of the sub-network of FNRs

99. The administration of FNRs is predominantly financed from government budget allocations (human resource costs are paid directly by the Treasury, while CAPEX and OPEX costs are paid from the annual bndget allocations to TFS). Annual budget allocations for the operational budgets of the FNRs are not adeqnate to meetthe requirements for even basic standards of reserve management, or sufficient to maintain the infrastructure and eqnipment in the reserves. Indications are that the government budget allocations to TFS for the operational costs of Forest Reserves (and more specifically FNRs) are, in the light of other more pressing demands on the national budget, not likely to increase significantly from their current base level of $\sim$ US $\$ 1.75 \mathrm{~m}$./ha/annum to fill any financing gap. Currently the only mechanisms to generate revenue for network of FNRs is the inconte accrued from fines, entry fees and camping fees. In 2013, FNRs generated an income of $<\mathrm{US} \$ 10,000$, considerably less than the actual costs of generating that income (let alone the recurrent operational costs of conservation management). There is thus a critical need to increase, diversify and stabilize the financial flows to FNRs, through the inıplementation of a more diverse portfolio of financing mechanisms.
100. Almost $80 \%$ of the recurrent expenditure in the FNRs comprises human resource costs, with insufficient funding allocated to recurrent operational and maintenance costs. Capital expenditures constitute a very low ( $0-3 \%$ ) proportion of total expenditure, implying an ongoing severe undercapitalisation of the FNRs. In recent years virtually no funds have consistently been allocated by TFS for any capital expenditure in the reserves, leaving the reserve management unable to replace ageing infrastructure, equipment and vehicles.Many FNRs are thus dependent onperiodic short- to medium-term grantsfrom a range of development partners to supplement shortcomings in their capital and operational budgets.
101. The determination of annual appropriations for the FNR network is currently not based on any objective criteria. Funding for annual operational expenditure in FNRs is typically determinedby the previous year's budget allocation, and consistently has little reference to the actual operational needs of the network of FNRs. Where annual operational budgets are approved by TFS, the actual funding allocation to the FNRs represents only $40-60 \%$ of the formally approved budget. The links between management plans and budget allocations also remains somewhat tenuous, with the suite of activities undertaken in each FNR largely determined by the funding allocation constraints and not by any strategic prioritization process.
102. There is nocompelling business case to motivate an increase in government funding of the FNR network (and wider system of Forest Reserves), notably through investments in nature-based tourism infrastructure and facilities that could contribute to improving the long-term financial sustainability of the FNR network. Information about the value of the goods and services directly provided by FNRs is still relatively weak, and government grant allocations are not premised on a clear understanding of the costs and benefits of the government's investment in FNRs. Currently the FNRs are considered a financial 'drain' on central government resources.
103. The TFS have to date not developed an overarching financial strategy for its network of FNRs, and there are no reserve-specific plans to guide the in sifu implementation of a range of viable financing strategies.There also appears to be a general lack of business, economic and finance skills and technologies in TFS to support a more business-oriented approach to the planning and management of FNRs.The financial management system of the TFS tends towards compliance and adherence to procedure rather than cost and implementation efficiency, and rarely cultivates the requisite business management skills within the FNRs. Most FNRs are run by forestry, enforcementand administrative staff who have limited or no training in budgeting, strategic planning, financial management systems or cost-effective approaches to protected area operations.
104. Development partner projects in FNRs have been largely opportunistic and ad hoc, and there is limited capacity in TFS to strategically secure ongoingfunding from multilateral development agencies, international conservation organizations, trusts and private donors for the protected area system in a strategic, coordinated and structured way. The TFS (previously the FBD) has also made no, or little, provision for the long-term cost and resourcing implications of donor-funded projects. Similarly, some development partners are investing heavily in capital infrastructure and equipment in FNRs without the concomitant resource allocation by TFS to maintain and upgrade these capital investments.
105. While there is considerable potential to develop nature-based tourism and adventure enterprises in and around FNRs, as a means of generating more sustainable income streams, no objectiveassessment of the tourism potential of each FNR has been undertaken and there is no common tourism development strategy for the FNR network.TFS, and the reserve management staff, also have extremely limited capacity and expertise to profitably plan, develop and administer tourism facilities and services in FNRs. Although tourism concessioning processes (notably those on a long term, build-operate-transfer modality) have been successfully implemented in the protected area sector in Tanzania, the competencies in TFS to facilitate and administer any tourism concessioning processes and concession agreements are weakly developed. The economic feasibility of tourism concessions will be premised to some extent on the assumption of the presence of some basic public infrastructure and services (roads, electricity, water, waste treatment, security, etc.) which in the case of many FNRs do not yet exist, potentially compromising the viability and profitability of any adventure or nature-based tourism concessionaires. Any concessioningprocess will thus require a significant investment in the development and maintenance of infrastructure and services.
entrance fees, user fees and research fees paid to the nature reserve. Two individuals from the local community - one from each of the 18 villages with MOUs - are also represented on the Amani Nature Reserve Advisory Board. Similar tailor-made approaches need to be tested, developed and implemented for the remaining 10 (both gazetted and proposed) FNRs in the network.
106. The enabling legislative and policy environment for promoting sustainable land and natural resource use practices in, and improving sustainable livelihood options for, local communities living in and around the forest reserves is well developed in Tanzania. A number of pilot projects have successfully demonstrated the effectiveness of these approaches in contributing to the measurable recovery of adjacent forest ecosystems. However the scaling up (in both space and time) of short-term sustainable land use and livelihood pilots has been constrained by inter alia the following: limited in situ capacity (staff, funding and skills) of the responsible public institutions to facilitate, support and enable sustainable land use practices and alternative livelihood initiatives beyond their initial introduction; a lack of meaningful incentives for communities to adopt these alternative land and natural resource use practices over the longer term; continued low levels of awareness prevailing among community members about the need to protect forest resources, and the means to do this; weak cooperative governance mechanisms between the district, villages, community members and forest management authorities to administer any agreed sustainable levels of forest use; poor and inconsistent enforcement of existing laws and regulations against forest degradation and deforestation by the responsible public institutions; and a lack of political will (at the village, district and national level) to protect forest resources, due to conflicting sectoral interests.

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103. The TFS have to date not developed an overarching financial strategy for its network of FNRs, and there are no reserve-specific plans to guide the in situ implementation of a range of viable financing strategies.There also appears to be a general lack of business, economic and finance skills and technologies in TFS to support a more business-oriented approach to the planning and management of FNRs.The financial management system of the TFS tends towards compliance and adherence to procedure rather than cost and implementation efficiency, and rarely cultivates the requisite business management skills within the FNRs. Most FNRs are run by forestry, enforcementand administrative staff who have limited or no training in budgeting, strategic planning, financial management systems or cost-effective approaches to protected area operations.
104. Development partner projects in FNRs have been largely opportunistic and ad hoc, and there is limited capacity in TFS to strategically secnre ongoingfunding from multilateral development agencies, international conservation organizations, trusts and private donors for the protected area system in a strategic, coordinated and structured way. The TFS (previously the FBD) has also made no, or little, provision for the long-term cost and resourcing implications of donor-funded projects. Similarly, some development partners are investing heavily in capital infrastructure and equipment in FNRs without the concomitant resource allocation by TFS to maintain and upgrade these capital investments.
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106. There is little or no general awareness of the existence of, and attractions in, FNRs. A large proportion ( $\sim 90 \%$ ) of visits to nature-based tourism destinations are facilitated by local and international tour operators, of whom very few have any knowledge of the FNR sites. There isthus considerable scope to improve the focused promotion and marketing of FNRs in Tanzania.

## STAKEHOLDER ANALYSIS

107. During the project preparation stage, a stakeholder analysis was undertaken in order to identify key stakeholders and assess their prospective roles and responsibilities in the context of the proposed project. The table below list the key stakeholder organisations; provides a brief summary of the responsibilities of each of these stakeholder organisations (specifically as it applies to nature protection); and describes the anticipated role of each of the stakeholder organisations in supporting or facilitating the implementation of project activities:

## Table 8: Stakeholder Analysis

| Organisation | Mandate of the organisafion (particularly in respect of FNRs) | Anticipated roles and responsibilities in the project |
| :---: | :---: | :---: |
| Ministries, Departments and Agencies(MDAs) |  |  |
| Vice President's Office (VPO) <br> Division of Environment (DoE) | The DoE is responsible for the coordination of all national and international matters related to environmental protection and management. It is also responsible for national reporting to the relevant international conventions. | The DoE will ensure the alignment and integration of the project activities with national environmental strategies and plans. |
| Ministry of Natural Resources and Tourism (MNRT) | The MNRT has responsiblityfor overseeing the management of all natural, cultural and tourism resources in the country. | The MNRT will, through the FBD,facilitate the formal proclamation of the targeted FNRs. It will also develop the enabling policiesand regulations in support of the |
| Forest and Beekeping Division (FBD) | The FBD is directly responsible for the development of forest policy, laws and regulations and supervising their implementation in the forestry sectors | effective planning and management of FNRs. |
| Tanzania Forest Service (TFS) | TFS is is an executive agency mandated with the management of national forest reserves (natural and plantations), bee reserves and forest and bee resources on general lands | The TFS willhave overall responsibility for implementation of the project. It will coordinate the implementation of all project activities, and may be responsible for the direct implementation of a number of these activities. It will take the lead role in ensuring ongoing communications with all government agencies and other parthers in respect of project implementation. |
| Tanzania Tourist Board (TTB) | TTB is a govermment organisation responsible for the promotion and development of the tourism industry. | The TTB will assist the project in the marketing and promotion of the tourism products and services in FNRs. |
| National Environment Management Council (NEMC) | The NEMC is responsible for the enforcement of, and ensuring compliance with, the national environmental quality standards. | The NEMC will assist in ensuring that any planned development activity implemented by the project will conform to all national environmental quality standards. |
| Ministry of Energy and Minerals (MEM) | The MEM is responsible for facilitating development of the energy and mineral sectors | The MEM will support the project by assisting in the regulation, monitoring and |


| Organisation | Mandate of the organisation (particularly in respect of RNRs) | Anticipated roles ind responsibilities in the project |
| :---: | :---: | :---: |
|  | in Tanzania through legislation, policies, strategies and plans for sustainable use. | enforcement of illegal woodfuel harvesting and mining activities in, or impacting on, FNRs. |
| Ministry of Finance and Economic Affairs (MFEA) | The MFEA is the central executive authority responsible for national financial policy and the management of state finances. <br> The MFEA prepares, administers and monitors the state budget. | The MFEA will be responsible for ensuring the ongoing allocation of funds in the state budget for TFS (and thus FNRs). <br> The MFEA will approve any state budget funds to be allocated as co-financing for the project. |
| Prime Minister's Office- Regional Adminsistration and Local Government (PMORALG) | The PMORALG is responsible for improwing the coordination between MDAs, Regional Administrations and Local Government Authorities. They are also responsible for monitoring and improving the institutional capacity and management systems of local government to deliver better quality services. | The PMORALG will facilitate improved linkages between, and alignment with, the project activities and relevant local government initiatives and programmes. PMORALG may also fund, through the Regional Authorities, complementary community development projects around FNRs. |
| Regional authorities (Regional Administrative Secretariats, RAS) | The regional authorities provide technical advice and support, and exercise supervision to, the District Councils. |  |
| Local Government Authorities (LGAs) |  |  |
| District Councils <br> Ward Development Council (WDC) | District Councils are responsible for delivering a range of social, economic and ecological services within their territories of jurisdiction. <br> The WDC is responsible for developing general development plans for the ward. Further, the WDC must manage disasters and environmental related activities within its ward. | WDCs may provide arbitration and confict resolution services, where conflicts may arise between communities and FNRs. District/ Ward community development staff working in the region of FNRswill support the implementation of project activities. |
| Village Authorities <br> Village Assembly <br> (Village Council) | The Village Councils are responsible for planning and coordinating development activities; rendering assistance and advice to the villagersengaged in agriculture, forestry, horticultural, industrial or any other activity; and for encouraging village residents to underfake and participate in communal enterprises. | Village Councils will provide a democratic institutional vehicle for the project to secure the support, involvement and beneficiation of local communities in project-related activities. They will represent affected communities in the negotiation and conclusion of JFA's between TFS and local communities. |
|  | Any proposed by-laws must be adopted by the village assembly before being submitted to the District Council for approval. |  |
| Village Natural Resource Committees (VNRC) | The VNRC are responsible for overseeing the protection, conservation and lawful utilization of forest resources | The VNRC will actively support the in situ implementation of project activities, notably in the monitoring and enforcement of reserve regulations. They willassist in thedevelopment and adoption of any regulations and by-laws necessary for the protection of FNRs. |
| Development partners and conservation funds |  |  |


| Organisation | of the organisation (paricularly respect of FNRs) | Anticipated roles and responsibilities in the project |
| :---: | :---: | :---: |
| Multilateral organizations (e,g, UNDP, EU, GIZ, World Bank) <br> Development Partners Group (DPG) | Multilateral organisationswill play a critical role in providing technical, financial and material assistance (through the MNRT, TFS, TFF, PMORALG and NGOs) in support of the planning, development and operationalization of FNRs. |  |
| Eastern Arc Mountain Endowment Fund (EAMCEF) | The EAMCEF will provide targeted funding, |  |
| Non-Government Organisations (NGOs) and Community Based Organisations (CBO's) |  |  |
| NGOs (e.g. TFCG, WWF, WSCT, CARE, CI, AWF, CEPF, IUCN,MJUMITA TNRF) <br> CBOs (e.g. women/youth groups, farmers/hunters associations) | NGOs and CBOs will support project activities through the ongoing implementation of complementary training, awareness-raising and education programmes in the villages abutting the FNRs. <br> NGOs and CBOs may also be contracted or concessioned, on a competitive bid basis, to implement specific community-development, tourism development or conservation management project activities. <br> The project may also enter into partnership agreements with existing NGO- or CBO-funded initiatives in, or linked to, the conservation management of FNRs. |  |
| Local communities |  |  |
| Local people living around the FNRs are one of the principal stakeholders in the project. Local people will be directly involved in, and benefit from, project activities in a mumber of ways. These include inter alia: (i) direct employment in conservation and tourism activities within the FNRs; (ii) participation in community-state-private sector nature-based tourism enterprises; (iii) training for, and involvement in, alternative livelihood and energy-use projects in villages; (iv) establishment and administration of community-based tourism/recreation enterprise; (v) controlled/subsidised access to sustainable natural resource use in FNRs; and (vi) co-management of FNRs. |  |  |
| Academic institutions and professional associations |  |  |
| Academic institutions (e.g. Sokoine university, Institute of Resource Assessment, TAFORI, IRA, Olmotonyi, TAWIRI, MWIKA) | Academic institutions will provide technical and professional support to, as well as supply and maintain key datasets for, the project. <br> They may also be contracted, on a competitive bid basis, to implement specific research, technicaland training/skills development project activities. |  |
| Tanzania Association of Foresters | The Tanzania Association of Foresters will provide professional advice and support to the project in the implementation of activities. |  |
| Private sector |  |  |
| The private sector will be an important project partner in the ongoing development of FNRs as nature-based tourism and recreation destinations for local and international visitors. They will directly participate in the establishment, management and marketing of commercial concessions in FNRs. They may also assist in supporting, or partnering in, community-based tourism/recreational nature-based tourism services and facilities in and around FNRs. Tourism operators may also, through the Tanzania Association of Tour Operators, seek to include specific FNRs (and their unique attractions) into tour itineraries in order to increase visitor numbers (and hence income) to FNRs. It is further envisaged that the private sector may procure carbon credits through voluntary carbon markets, as an investment in the rehabilitation and restoration of native forests in the FNRs. |  |  |

## BASELINE ANALYSIS

## State funding of FNRs

108. The total approved annual operational budget for the TFS (2012) wasabout $\$ 25$ million per annum. Of this total operational budget, around $\$ 470,000$ was allocated for the management of the 11 gazetted and proposed Forest Nature Reserves ${ }^{30}$.With a total staffing complement of 104 staff, the annual human resource budget for all FNRs from the state treasury is conservatively estimated (using the median salary band for each staffing level)at US $\$ 1,248,000$ per annurn. The TFS capital expenditure budget for FNRs is highly variable year-on-year, ranging from US $\$ 0$ to US $\$ 50,000 /$ annum over the last 5 years. Total annual extra-budgetary support from the different zonal offices - primarily for additioual contract labour staff costs - is conservatively estimated at an average ofUS $\$ 20,000$ per annum.
109. Assuming that the state and TFS funding support for FNRs will remain relatively constant (with an annual inflationary adjustment), then the funding for human resource, operating and capital expenditure costs in FNRs would equate to approximately US $\$ 8,815,000$ over the entire project timeframe of five years. Based on an indirect cost rate of $40 \%^{31}$ - for financial management; human resource management; administrative; professional; and technical/maintenance support services- the financial contribution of TFS Zonal Offices and TFS Management Team to the planning and management of FNRs is conservatively estimated at a furtherUS $\$ 3,526,000$ for the terin of the project implementation. The core TFS investment in FNRs over the next 5 years will focus on 7 key strategic areas: improvement of community livelihoods; reducing illegal activities; reducing fire incidences; increasing revenues; improving the equipment; developing the infrastructure; and determining the total economic value of/in the FNRs. The suite of activities under each of these strategic areas is summarised as follows:

Table 9: TFS Strategic Area Activities

| Strategic area | Activities |
| :---: | :---: |
| Improve Community Livelihoods | Beekeeping activities; commercial tree nursery and tree planting (cloves, spices); vegetable farming; mushroom farming; fish farming; and dairy goats and cows. |
| Reducing human illegal activities | Community sensitization and awareness raising on good governance and tree harvesting procedures (Workshops); Conduct a training on Management Effectiveness Tracking Tool (METT); Law enforcement (patrols, preparation and installation of signboard); Maintenance of 138 km of the boundary; JFM initiatives, Review of villages, NFRs' management agreements and development of by-laws; and Promotion of efficient cooking stoves. |
| Reduce fire incidences | Rehabilitation and restoration of degraded area; and Training on fire wise comnunity package to staff and adjacent communities |
| Increase revenue generation | Maintenance of one camp site and three picnic sites (rest point) and management of 28 km of nature trails, 9 km of forest road; Re printing of " 200 copies of tree of Amani" ANFR Book <br> Advertisements |
| Improve working facilities | Purchase of one hardtop cruiser; Purchase of Two motorcycles; Two sets of Camping facilities; Purchase of two Generators; Maintenance of one tractor and one trailer. |
| Develop the infrastructure | Renovation of two rest house; Construction of Resort/Apartment to catch sensitive tourist; Construction of two Rangers posts <br> Finalize Emau rest house (water supply, electricity and furniture) |

[^13]| Determination of the <br> total economic value of <br> the NFRs | Valuation of Direct value (e.g. water, timber, and non-timber resources) and Indirect <br> value (e.g. carbon sink, biodiversity) |
| :--- | :--- |

110. The Tanzania Forest Fund (TFF) is a Conservation Trust Fund established by the Forest Act Cap. 323 [R.E. 2002] under Sections $79-83$. The TFF was operationalised in July 2010 and is a not-for-profit Public Fund, governed by Board of Trustees. The TFF provides financial assistance to various stakeholders in inter alia: forest resource conservation and management; community-based forest conservation and sustainable livelihoods; and applied and adaptive research on management of forest resources and livelihoods. The sources of funds for the TFF are: (i) a levy of $2 \%$ of every prescribed fee payable under the Forest Act; (ii) a levy of $3 \%$ of any royalty payable under the Act; (iv) grants, donations, bequests or such sums contributed by any private individuals, corporate bodies, foundations, or international organizations or funds within or outside the country; (v) any sums realized by sale of any forest produce confiscated under any of the provisions of the act; (vi) any income generated by any project financed by the Fund; (vii) and any such funds acquired from various sources. The income to the TFF in 2012/2013 totalled~US $\$ 3,125,000$, of which US $\$ 0$ was spent in direct support of the planning and management of FNRs. Direct funding support from the TFF to the network of 11 FNRs is however expected to total at least $\$ 1$ million over the five-year period of the project.

## Other funding and technical support to FNRs

111. Donor agencieshave committed significant financial support to forest conservation activities in Tanzania, withfunding commitments over the last ten years totalling more than US $\$ 100$ million to date. A significant proportion of these funds are being channelled through NGOs and the private sector, with the latter increasingly getting greater attention. The main donors are the Governments of Norway and Denmark (through their Embassies in DaresSalaam), the Ministry of Foreign Affairs in Finland (through the Embassy and the FAO), the WB and UNDP-GEF. Donor support has,over the years, helped to establish a network of field-based projects in indigenous forests, albeit mostly in the Eastern Arc Mountain forests but later expanded to cover the coastal forests. These projects and activities include:

- Participatory Forest Management (PFM): Several NGOs (including TFCG, WWF, WCST/DOF and MCDI) are implementing a range of donor-funded initiatives to: assess the effectiveness of PFM in Tanzanian forests; document lessons learnt in the implementation of pilot PFM projects; and scale-up implementation of PFM in targeted districts and villages. UNDP-GEF (through CARE International in Tanzania) has also provided support to community-based PFM initiatives around Uluguru FNR, while Irish Aid provides support to the TFS Forest District officers in Muheza and Kilombero in the implementation of PFM;
- Tree planting:Farmers living close to the Eastern Arc Mountains and coastal forests are being supported in the plantingof over one million trees a yearin order to secure a more sustainable source of fuel wood, building materials and cash income for villagers;
- Fuel efficient stoves: Households in rural villages and districts are being enconraged and incentivised to adopt the use of more efficient fuelwood cooking stoves.Initiatives to train the villagers in the construction of these wood-saving cooking stoves is also underway;
- Research and monitoring: European government donor agency support for training and research (prinnarily in the Eastern Arc Mountains) has been implemented by a nnmber of NGOs (primarily WWF, TFCG and WCST). Over $25 \%$ of Norwegian funding (through the Royal Norwegian Embassy of Tanzania) has been committed to the Sokoine University of Agriculture (SUA) for research, focusing on natural resource management and climate mitigation and adaptation strategies.
- Conservation of FNRs:In 2010, the government of Germany - through UNDP - provided about2 million Euros to assist the government in strengthening the conservation capacity ofthree FNRs(Kilombero, Nilo and Uluguru). These funds were used to construct office buildings, staff housing and ranger outposts; procure and install solar power supply; procure office equipment and fittings; and purchase vehicles and motorcycles in the targeted FNRs.
- Honey and wax: Several hundred farmers (including those from FNRs) are being supported in the production and sale of honey and beeswax;
- Butterfly farming:An NGO (TFCG) supports a cooperative of butterfly farmers near Amani FNR (the 'Amani Butterfly Project) to farm, produce and export butterfly pupae to customers (mainly in Europe and USA). A percentage of the income is put aside in a village development fund for financing community-based projects;

112. For the five year period of project implementation, a significant baseline investment in the conservation of indigenous national forests hasalready been committed by a diverse range of donor agencies. The total value of this investment is conservatively estimated at $\sim \operatorname{US} \$ 16$ million per year. Of this baseline investment, direct funding support to the network of 11 FNRs is expected to total at least $\$ 1$ million over the five-year period of the project. This includes donor investments in: (i) ecological baseline research in Mount Rungwe; (ii) restoring the Bunduki gap corridor to Uluguru FNR; (iii) developing community buffer zones, and implementing awareness-raising programmes, in and around Amani FNR and Nilo FNR; (iv) implementing an awareness-raising programme in and around Mkingu FNR; and (v) training students at Amani FNR and Kilombero FNR.
113. Over the past five years, much of the forest funding coming to Tanzania has been used to support the REDD+ forest financing framework in Tanzania. Donor government agencies are the primary contributors, with the vast majority of these funds committed by the Government of Norway (US $\$ 84.4$ million, with US $\$ 80,200,000$ of this amount directed through the Royal Norwegian Embassy in Tanzania). This funding was used to conduct REDD+ field activities through nine NGOs (TFCG, TaTEDO, WCST, WWF, JGI, MCDI, WCS, AWF and CARE) and to support capacity building and coordination activities on forest carbon at the Sokoine University of Agriculture and the University of Dar es Salaam. The second phase of the REDD+ programme will be implemented nationally by the MNRT - with the support of development partners (e.g. FAO, UNEP and UNDP) - from the start of 2014. It is currently uncertain what the anticipated value of investment by the Tanzanian government in REDD+ in FNRs would equate to during the project period.
114. The Eastern Arc Mountains Conservation Endowment Fund (EAMCEF) is registered under the Trustees' Incorporation Act [Cap.318, R.E. 2002]. The fund operates as a not-for-profit NGO and provides financial and technical assistance inthe improvement of rural livelihoods, management of protected areas
and climate change, and applied research in the Eastern Arc Mountains (focusing on East Usambara Mountains; Udzungwa Mountains; Uluguru Mountains; Nguru Mountains; West Usambara Mountains; and South Pare Mountains). The EAMCEF annual budget for $2012 / 2013$ was US $\$ 1.187$ million. The EAMCEFhas made a five-year funding commitment to supplement the operational budgets of the 8 FNRs forming the core of the proposed Eastern Arc Mountain World Heritage Site. This funding support for recurrent operational costs in FNRs currently equates to a total contribution of $\sim \mathrm{US} \$ 175,000 / \mathrm{annum}$. It is anticipated that the EAMCEF will contribute at least a further $\sim \$ 700,000$ of investment capital and technical support during the project period to conservation-related projects in and around the FNRs within the Eastern Arc Mountains.

## Financing gap for FNRs

115. It is estimated that the total funding requirements to support the basic operational management of 10 of the 11 FNRs (excluding Magamba, for which data was not yet available) over the five-year time frame of the project is TZS 36.1 billion, of which TZS 28.7 billion ( $\sim 80 \%$ ) represents the financing gap.
116. A more detailed baseline analysis, and assessment of the financing gap, for FNRs is appended in Section IV, Part VI, (Technical Reports and Information) of the UNDP PRODOC.

## PART II:Strategy

## Project Rationale and Policy Conformity

## Fit with the GEF Focal Area Strategy and Strategic Programme

117. The project is aligned with the goal of the GEF's Biodiversity Focal Area Strategy, 'Conservation and sustainable use of biodiversity and the maintenance of ecosystem goods and services'. The impact of the project will be measured in terms of the 'Biodiversity conserved and habitat maintained in national protected area systems', using the indicator'Intact vegetative cover and degree of fragmentation in national protected area systems measured in hectares as recorded by remote sensing'.
118. The project is consistent with Objective 1 of the biodiversity focal area strategy, 'Improve Sustainability of Protected Area Systems'. The project will contribute to the following outcomes underObjective 1: Outcome 1.1 'Improved management effectiveness of existing and new protected areas'; and Outcome 1.2 'Increased revenue for protected area systems to meet total expenditures required for management'.
119. The project will contribute to the achievement of GEF's outcome indicators and core outputs under Objective 1 and Outcome 1.1 and 1.2 as follows:

Table 10: GEF Focal Area Objectives

|  |  |  |  |
| :---: | :---: | :---: | :---: |
| Ohfective | Bryeder Omeome |  <br>  |  $1001 \mathrm{nu}(3)$ |
| Objective 1 <br> Improve <br> sustainabilit <br> y of <br> Protected <br> Area <br> Systems | Outcome <br> 1.1 <br> Improved management effectiveness of existing and new protected areas | Indicator 1.1 <br> Protected area management effectiveness as recorded by Management Effectiveness Tracking Tool <br> Project contribution to indicator: METT scores for the 11FNRs will improve from an average baseline score of $38 \%$ to $>51 \%$ by end of project | Output 1 <br> Newprotected areas(number) andcoverage (hectares) of unprotectedecosystems. <br> Project contribution to output: <br> Five new FNRs gazetted, covering 104,717ha of high forest ecosystems <br> Output 2 <br> Newprotected areas(number) andcoverage (hectares) ofunprotected threatenedspecies (number). <br> Project contribution to output: <br> Five new FNRs gazetted, covering 104,717ha ha of 195 locally endemic species (34 threatened animal species) |
|  | Outcome <br> 1.2 <br> Increased revenue for protected area systems to meet total expenditures required for management | Indicator 1.2 <br> Increased revenue for protected area systems to ineet total expenditures required for management <br> Project contribution to indicator: <br> Revenue (own income) for the network of FNRs will increase from a baseline of $<U S \$ 10,000$ <br> lannumto $>$ US $\$ 100,000$ /amnum by end of project | Output 3 <br> Sustainable financing plans (number) <br> Project contribution to output: <br> One Financial Plan prepared and adopted for the network of FNRs <br> Business Plans incorporated into the Reserve Management Plans for six FNRs. |

## Rationale and summary of GEF Alternative

120. The GEF increment will assist the Tanzania Forest Service to put in place a functioning network of Forest Nature Reserves across the most biodiversity rich forests of the country. By implementing this alternative strategy, over and beyond business-as-usual, critically important forest and montane grasslands habitats will be safeguarded, supporting at least 200 species of plants and vertebrate animals that are uniquely confined to those forests. So will a significant carbon stock and a critical water regulation function for millions of Tanzanians. This project forms part of a suite of GEF initiatives that have the aim of strengthening Tanzania's complex PA system (across different PA categories) and builds programmatically on previous and existing GEF projects designed to support forest conservation. The project is the first initiative in Tanzania designed to systematically strengthen the network of Forest Nature Reserves. While other initiatives have strengthened individual FNRs, they have not addressed the needs of the network as a whole. Moreover, the project will invest in gazetting and operationalizing new FNRs that have not been the target of other investments, thus enhancing the conservation security of these areas. This is an opportune time to advance this initiative, given that the management authority - the TFS - has recently been established.
121. Without the GEF investment in the proposed project, the 'business-as-usual' scenario for the FNR network in the next few years is one where: (i) continuous delays in gazetting the proposed FNRs, leads to management inertia, and sustained pressure on the unprotected forests for agriculture and natural resource use; (ii) a lack of meaningful benefit-sharing with local communities increasingly strains the relationship between conservators and village governments leading to the continued exploitation of forest resources in FNRs; (iii) the FNRs continue to have insufficient funding to staff, equip and effectively manage the FNRs, with the funding 'gap' annually increasing; (iv) there is limited cooperation, collaboration and sharing of resources across and between the individual FNRs resulting in operational inefficiencies, and duplication of effort; (v) a weak enforcement capability in FNRs leads to continued fragmentation of FNRs as a result of illegal encroachments, fires, wood collection, mining and poaching; (vi) development partner and other donor-funded support remains $a d$ hoc and opportunistic, with no strategic link to the priorities of Reserve Management Plans; (vii) limited basic administrative, management and enforcement equipment and infrastructure compromises the ability of reserve staff to fulfil their conservation mandate; (viii) there is limited awareness of FNR's, and no capital and operational budget investment in developing and maintaining the requisite visitor facilities and services, resulting in extremely low visitor usage; and (ix) an inadequate investment in the ongoing equipping, training and development of FNR staff leads to loss of experienced staff and exacerbates the inefficiencies in reserve management and enforcement operations.
122. Alternative scenario enabled by the GEF: The project has been designed to incrementally build on the existing foundation of institutional capacities in, and financial resources of, the Tanzania Forest Service (TFS).It will specifically target the following focal areas for investment: (i) securing an ecologicallyrepresentative sub-network of legally secure FNRs that is configured to ensure that populations of high forest species can persist in the wild; (ii) strengthening the systemic, institutional and individual capacity of the TFS to fulfil its conservation mandate for the network of FNRs; and (iii) ensuring that the individual FNRs are sufficiently staffed, adequately resourced and sustainably funded to achieve their defined management objectives. The project has thus been organised into two components, and will be implemented over a period of five years. The first component of the project will support the expansion of the FNR network by facilitating the gazettingof five new FNRs (Chome, Magamba, Mkingu, Minziro and

Uzungwa Scarp)and improving the planning, operations and governance of these five new FNRs, and one existing FNR (Rungwe).It will also encourage a more consistent and cohesive approach to the planning and management of the six targeted FNRs as an integral part of the broader network of 11 FNRs.Component 1 has four key areas of project support: (i) securing the conservation status and boundaries of the six FNRs; (ii) supplementing the core staffing complement, infrastructure and equipment in the six FNRs; (iii) strengthening the governance of, and benefit sharing in, the six FNRs; and (iv) enhancing the capacity of the TFS to plan and administer the six FNRs as an integral part of the wider FNR network. The second component of the project is focused onenhancing the financial sustainability of the entire network of 11 FNRs to ensure that they incrementally develop the capacity (over the longer-term) to generate adequate financial resources to cover the full costs of their management. Component two has three key areas of project support: (i) facilitating public-private partnerships in the commercial development of tourism and recreational facilities and services in FNRs; (ii) marketing the destinations, attractions, facilities and services of FNRs and (iii) implementing other income-generating activities in targeted FNRs.
123. The total costs of investment in the project is estimated at US $\$ 23,700,000$, of which US $\$ 4,100,000$ constitutes grant funding from GEF and US $\$ 19,600,000$ comprises co-financing from the Government of Tanzania (MNRT and TFS), UNDP, EAMCEF and NGOs (TFCG and WWF).

## Incremental Cost Reasoning

124. Global Environmental Benefits: By implementing the above-mentioned components, the GEF investment will significantly contribute to an improvement in the conservation security of, and the reduction of threats to, 305,000 ha of high forest biodiversity in Tanzania. All 11 FNR sites targeted by the project are identified as Key Biodiversity Areas, and 4 are also Alliance for Zero Extinction sites. The project will include an additional 104,717 hectares of forest into the current network of FNRs. It willsecure and enhance the protection of viable populations of at least 195 locally endemic species (including at least 34 threatened animal species) located within the largest high forest blocks in the country. These include species such as the RungweGalago, one of the world's 25 rarest primates, the endangered UsambaraHyliota, Africa's rarest monkey, the kipunji and Africa's rarest antelope, the Abbott's duiker ${ }^{32}$. Although not designed as a climate change emissions reduction initiative, the project will also secure a carbon reservoir of an estimated 300 tons of carbon/ha; the new sites to be gazetted together have an estimated total carbon store of 35 million tons.
125. Strengthening the FNR network will generate significant socio-economic benefits at the local, national and global levels. At the local and national levels, direct benefits will include among other things; employment as community-based tour guides; sub-contracting of community-based businesses; procurement of locally produced supplies; training and skills development; direct employment of individuals from local communities; participation in the ownership of tourism enterprise; and investment in upgrading local services (water, roads, electricity).
126. In terms of tourism, Tanzania's attraction as a nature tourism destination will be fortified, with real new opportunities tapped for tourism revenue and employment creation. The project will provide additional tourism attractions for Tanzania - opening up forest areas as a new tourism product, based on best practices from community based tourism elsewhere, such as KahawaShamba, amongst others. Locally, communities will be able to benefit from new tourism development opportunities (e.g. through direct employment as full time or part time staff at the NR offices and private guest houses in the area). Part time

[^14]employment may include engagement in boundary clearance as well as through new business opportunities (e.g. shops, restaurants) following increased number visitors in these NRs.
127. In addition, the proposed commercial joint ventures (e.g. through beekeeping and butterfly farming) will further create both employment and revenue generation for local communities in the area. Local communities will also benefit from various training and capacity building programs on entrepreneur development (e.g. on things such as commercial beekeeping, value additions, processing and packaging of non-timber forest products (TFP). These arrangements will inevitably create employment and generable substantial socio-economic benefits to target communities.
128. Furthermore, in order to secure livelihoods particularly for vulnerable and marginalized members of forest adjacent communities, safeguards will be put in place to ensure equitable and sustainable sharing of benefits from FNRs. This will be done through a formal Memorandum of Understanding (MOU) to be signed between the reserve and each adjacent village government. In line with UNDP policies and the government commitments to gender mainstreaming, attention will be placed on gender equity, and in particular to ensuring full participation of women in consultations and decision making related to natural resource management and land-use planning processes that affect their livelihoods and welfare.

## Project Goal, Objective, Outcomes and Outputs/activities

129. The project objective is to:expand, financially secure and strengthen the management effectiveness of Tanzania's forest nature reserves network in response to the threats to their biodiversity.
130. In order to achieve the project objective, and address the barriers (see Section 1, Part I), the project's intervention has been organised into two components (this is in line with the components presented at the PIF stage):

## Component 1: Consolidating and improving the management of the FNR network

131. Work under this component is focused onimproving the legal status, planning,operations and governance of five new FNRs (Chome, Magamba, Mkingu, Minziro and Uzungwa Scarp) and one existing FNR (Rungwe)so that they are better able toproactively respond to threats to, and pressures on, theirunique biodiversity. It will also encourage a more consistent and cohesive approach to the planning and management of the new FNRs as an integral part of the broader network of FNRs.

## Component 2: Strengthening the financial sustainability of the FNR network

132. Work under this component is focused on enhancing the financial sustainability of the entire network of 11 FNRs to ensure that they incrementally develop the capacity (over the longer-term) to generate adequate financial resources to cover the full costs of their management.
133. The outputs and activities under each of the two components are described in more detail below.

Component1: Consolidating and improving the management of the FNR network
134. Work under component one will be committed to four key areas of project support in six targeted FNRs (Chome, Magamba, Mkingu, Minziro, Uzungwa Scarp and Rungwe): (i) securing the conservation
status and boundaries of the six FNRs; (ii) supplementing the core staffing complement, infrastructure and equipment in the six FNRs; (iii) strengthening the governance of, and benefit sharing in, the six FNRs; and (iv) enhancing the capacity of the TFS to plan and administer thesix FNRs as an integral part of the wider FNR network.
135. Outputs $1.1-1.3$ will support the gazetting and initial in situoperationalization of five proposed new FNRs (Chome, Magamba, Mkingu, Minziro and Uzungwa Scarp) and improving the operational capacity of one existing FNR (Rungwe). The outputs will collectively support the development of the following basic operating capacity in eachof the six targeted FNRs:

## Table 11: Project contribution to FNR Legal and Operational Capacity

| Basic FNR legal status and operational capacity to be effected by the project | Proposed contribution of GEF-funding in supporting the establishment of this basic legal and operational capacity |
| :---: | :---: |
| 1. The FNR is formally gazetted. | Legal procedures (DSA costs, advertising costs, legal costs). |
| 2. The FNR has an approved overarching Reserve Management Plan that is operationalised amually through an Annual Plan of Operations. | Reserve Management Plan (professional support services, DSA, mapping, printing and fuel costs) |
| 3. The boundaries of the FNR are surveyed. | Survey beacons (DSA costs, material costs, contract labour costs). |
| 4. The boundaries of the FNR are demarcated. | Boundary clearing (contract labour costs@ USDI00/km). |
| 5. The entry points to the FNR are secured (where required) and signposted. | Gatesbooms and signage (design costs, material costs, contract labour costs). |
| 6. The entry points to the FNR are signposted. | Entry signage (material and production costs, contract labour costs). |
| 7. The FNR has a basic full-time reserve staff complement ( $\sim 8-12$ staff). | None (TFS co-financing). |
| 8. Individual FNR staff are adequately equipped. | Staff equipment (communications, overalls, boots, hats, binoculars, etc. @ max. of US $1000 /$ person and max of 12 staff/reserve). |
| 9. The FNR has a basic transport capability. | Vehicles ( 1 pickup/hardtop@ max of US $\$ 40000 /$ vehicle, 3 motorbikes @max of US $\$ 5000 /$ motorbike, fixed allocation of fuel costs). |
| 10. The FNR has a basic office complex (comprising 2 offices, meeting room, toilets and kitchen). | Building (architect, QS and building contractor costs, installation costs of water, power, phone, internet and waste disposal services, procurement of basic office furniture and computer/printing facilities @ max. of US $\$ 80,000$ office and US $\$ 40,000$ for office renovation). |
| 11. The FNR has basic accommodation units for key staff ( $\sim 2-3$ staff). | Building (architect, QS and building contractor costs, installation costs of water, power, and waste disposal services @ max. of US $\$ 40,000 /$ house). |
| 12. The FNR has at least 2 ranger outposts for forest ranger staff. | Ranger outpost (architect, QS and contractor costs, installation costs of water, power, and waste disposal services @ max. of US $\$ 40,000 /$ outpost). |
| 13. The key roads in the FNR are all passable. | Road upgrade/maintenance (material and labour costs for reconstruction/repair of critical damaged sections, hire costs of grader, material and labour costs for installation of drainage points in key areas). |
| 14. The FNR footpaths are all maintained and adequately signposted. | Footpath maintenance and signage (contract labour costs, material and production costs). |


| Basic FNR legal status and operational <br> capacity to be effected by the project | Proposed contribution of GEF-funding in supporting the <br> establishment of this basic legal and operational capacity |
| :--- | :--- |
| 15. All households living in adjacent villages are <br> informed about, and aware of, the conservation <br> status, implications and potential benefits of the <br> FNR. | Communication and awareness-raising campaign (DSA, fuel costs, <br> material and production costs) |
| 16. The FNR has concluded and signed a <br> collaborative MOU with each adjacent village <br> government. | Village-based MoUDSA and fuel costs |
| 17. The FNR has a functional co-management <br> structure in place, with representation of each <br> adjacent village | Reserve Committee (DSA, fuel costs) |
| 18. Adjacent villages are starting to derive <br> tangible benefits from the existence of the FNR | None (co-financing from TFS, MNRT, Tanzania Forest Fund, <br> EAMCEF, development partners) |

136. It is envisaged that an improvement in operational capability will then enable reserve management to better understand, contain and reverse the detrimental effects of agricultural encroachments; wildfires; logging; wood harvesting; livestock; poaching; hunting; mining; and spread of IAS on the conservation values of each reserve.
137. The proposed suite ofactivities, and broad implementation arrangements, for each of the four outputs are described in more detail below.

Output 1.1: The conservation status and boundaries of six FNRs are secured
138. All the preliminary groundwork to gazette the five targeted new nature reserves (Chome, Magamba, Mkingu, Minziro and Uzungwa Scarp)has been completed, including extensive consultations with the local (village, ward, district and regional) authorities and adjacent villages (see table of progress in theproclamation for each FNR the table under Barrier 1 in Section I, Part I) ${ }^{33}$. The documentation papers for these FNRs are all now in the process of being prepared and/or being processed by the ministerial Legal Officers.The project will thus provide logistical support to the ministerial Legal Officers in the: (a) drafting of all Declaration Orders (DO); (b) submission ofeach draft Declaration Order to the Attorney General's Chambers for vetting; (c) securing of the Ministers signature of each vetted Declaration Order; and (d) publishing of the Government Notice (GN) declaration for each FNR in the Government Gazette (GG).
139. As each of these five proposed FNRs (Chome, Magamba, Mkingu, Minziro, Uzungwa Scarp) is officially gazetted ${ }^{34}$, the following activities will then be undertaken in each FNR:
(i) Update the existing Reserve Management Plan(RMPs) -Chome, Magamba, Mkingu and Rungwe.
(ii) Prepare a new RMP - Uzungwa Scarp and Minziro.

[^15](iii) Within the broad planning framework of the RMP, support the iterative development of key subsidiary plans ${ }^{35}$ (e.g. IAS control programme, Integrated Fire Management Plan, Enforcement and Compliance programme).
(iv) Relocate all surveyed reserve boundary markers (typically concrete beacons or stone cairns) and, as required, replace or repair any missing markers.
(v) Regularly maintain a boundary firebreak, footpath or brushcut strips (where the boundary is not already defined by some other permanent feature, such as a road) in order to clearly demarcate the reserve borders.
(vi) Install boom gates at selected control entry points, as required.
(vii) Design, produce and install signage at all reserve entry points and along the reserve boundaries.
140. The table below provides an overview of the indicative extent and nature of GEF support to be provided under this output for each of the targeted FNRs.

Table 12: Extent and Nature of Support for the targeted FNRs under Output 1.1

| Basic FNR legal status and operational capacity to be effected by the project | Chome | Magamba | Mkingo | Minziro | Uzungwa Scarp | Rungwe |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. The FNR is formally gazetted. | Drafting of DOvetting of DOsigning of DOpublication of GN in GG | Drafting of DO - vetting of DO signing of DO publication of GN in GG | Drafting of DO-vetting of DO-signing of DO-publication of GN in GG |  |  | None |
| 2. The FNR has an approved overarching Reserve Management Plan (RMP). | Update RMP + subsidiary plans | Update RMP + subsidiary plans | Update RMP + subsidiary plans | Draft new RMP + subsidiary plans | Draft new RMP + subsidiary plans | Update RMP + subsidiary plans |
| 3. Surveyed boundary markers are in place. | Relocate and replace or repair, as required |  |  |  |  |  |
| 4. The boundaries of the FNR are demarcated. | 67 kin of clearing | 82 km of clearing | 142 km of clearing | 80 km of clearing | 126 km of clearing | 164 km of clearing |
| 5. The entry points to the FNR are secured (where required). | 3 gates | 2 gates | 3 gates | 2 gates | 3 gates | 2 gates |
| 6. The entry points to, and boundaries of, the FNR are signposted. | 8 signs | 10 signs | 8 signs | 10 signs | 12 signs | 12 signs |

[^16]141. The Survey and Mapping Department in the Ministry of Lands, Housing and Human Settlentents will provide technical support to the Conservators in the in situ surveying and mapping of the FNRs.
142. The Project Coordinator will, in collaboration with the MNRT and TFS, provide financial and technical support to the MNRT Legal Unit in the drafting of the DO's and the preparation of GN's for publishing in the GG. The Project Coordinator will also, in consultation with the relevant TFS Zonal Offices and FNRs Conservators : a) procure all reserve signage and other materials (e.g. boundary markers, gate booms, slashers, chainsaws, axes); and (b) contract an international protected area planning consortium to provide specialist 'backstopping' to FNRs in the preparation of the RMP (and linked subsidiary plans) in each FNR.
143. Each FNR Conservator will source, contract and overseelabour from local communities in the clearing of the reserve boundaries and installation of all entry and boundary signage.
144. The TFS will make provision in the annual operational budget of each FNR for the costs of the ongoing clearing of the reserve boundaries and regular maintenance of gates and signage.

Output 1.2: The core staffing complement, infrastructure and equipment of six FNRs is in place
145. Work under this output is focused on addressingthe critical infrastructural and equipment needs in the six targeted FNRs (Chome, Magamba, Mkingu, Minziro, Uzungwa Scarp and Rungwe). GEF funds will be used to support the: (a) basic equipping of reserve management staff; (b) renovation and construction of key reserve infrastructnre; (c)installation of basic services for all staff accommodation and administration facilities; and (d) procurement and installation of critical reserve vehicles.
146. The specific activitiesto be undertaken in this output will include the following:
(i) For each forest ranger that is appointed, paid and deployed by the TFS in the targeted FNRs, procure the requisite uniform (e.g. boots, overalls, hats, insignia) and other basic safety equipment (e.g. communications, torch, backpack, binoculars, water bottles, first aid supplies).
(ii) Procure an off-roadhard topor pickup truck ${ }^{36}$, and $125-250 \mathrm{cc}$ off-road motorcycles, for each of the targeted FNRs.
(iii) As required, renovate and refurbish existing ranger outposts and administrative offices (including the upgrading/addition of buildings, supply of potable water, generation of power, provision of sewage and waste treatment systems and basic fumishing and equipping of outposts) in the targeted FNRs.
(iv) As required, construct new ranger outposts and administrative offices (including offices, storage area, garage, workshop, supply of potable water, generation of power, provision of sewage and waste treatment systems and basic fumishing and equipping of outposts) in the targeted FNRs.

[^17](v) Maintain/upgrade the key primary roads traversing the FNRs, including inter alia the following actions: filling ruts and holes; resurfacing; grading; water control (e.g. culverts, drains); and replacing/installing road signage.
(vi) Maintain/upgrade the main footpath network in each FNR, including inter alia the following actions: clearing of overhanging vegetation; resurfacing; repairing steps; water control (drainage); and replacing/installing footpath signage.
147. The table below provides an overview of the indicative extent and nature of GEF support to be provided under this output for each of the targeted FNRs.

Table 13: Extent and Nature of Support for the targeted FNRs under Output 1.2

| Basic FNR legal status and operational capacity to be effected by the project | Chome | Magamba | Mkingo | Minziro | Uzungwa Scarp | Rungwe |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8. Individual FNR staff are adequately equipped. | 12 | 8 | 12 | 8 | 8 | 12 |
| 9. The FNR has a basic transport capability. | $3 \mathrm{M} / \mathrm{bikes}$ | 1 off-road vehicle $3 \mathrm{M} / \mathrm{bikes}$ | 1 off-road vehicle $3 \mathrm{M} / \mathrm{bikes}$ | 1 off-road vehicle $2 \mathrm{M} / \mathrm{bikes}$ | 1 off-road vehicle <br> $2 \mathrm{M} / \mathrm{bikes}$ | 1 off-road vehicle <br> $3 \mathrm{M} / \mathrm{bikes}$ |
| 10. The FNR has a basic office complex (comprising 2 offices, meeting room, toilets and kitchen) ${ }^{37}$. | 1 | Renovation/ expansion | Renovation/ expansion | 1 | 1 | 1 |
| 11. The FNR has basic accommodation units for key staff ( $\sim 2-3$ staff). | - | Renovation | - | 2 | 2 | - |
| 12. The FNR has at least 2 ranger outposts for forest ranger staff. | 3 | 2 | 3 | 2 | 2 | 3 |
| 13. The key roads in the FNR are all passable. | 20km | 13 km | 30km | 25km | 30km | 40km |
| 14. The FNR footpaths are all maintained and adequately signposted. | $\begin{aligned} & 50 \mathrm{~km} \\ & (20 \text { signs }) \end{aligned}$ | $\begin{aligned} & 30 \mathrm{~km} \\ & (15 \text { signs }) \end{aligned}$ | $\begin{aligned} & 25 \mathrm{~km} \\ & (15 \text { signs }) \end{aligned}$ | $\begin{aligned} & 35 \mathrm{~km} \\ & (15 \text { signs }) \end{aligned}$ | 40 km <br> ( 20 signs) | 50 km <br> (20 signs) |

148. The Project Coordinator will, in collaboration with the Tanzania Buildings Agency (TBA) and the TFS, contract locally orregionally-sourced architectural/civil engineering firms to project-manage the planning, construction and/or services installation for the office complexes, accomodation units, ranger outposts and road maintenance in the six reserves. The Project Coordinator will, in consultation with the relevant TFS Zonal Offices and FNRs Conservators, also procure the requisite vehicles, staff equipment and road/footpath signage for each of the reserves.
149. For each reserve where construction works are underway, the affected Conservator will: a) attend all site meetings; b) monitor and control the contracted architectural/engineering firm and their subcontractors; c) oversee the implementation of all environmental controls; and d) recommend the approval of phased payments for work completed. Each FNR Conservator will also source, contract and oversee

[^18](iii) For each formalised village-based MOU in each FNR, assist the reserve management and the village government in the planning of, and fund-raising for, the implementation of livelihood development opportunities that are explicitly identified in these MOUs.
(iv) For each targeted FNR that has been gazetted, establish a formal joint co-management structure ${ }^{39}$ that can inter alia: facilitate broader community and local government participation in the reserve management decision-making; agree on reserve-wide regulations required to control community access to the reserve's natural resources; collectively enforce tenure and natural resource use agreements between the community and reserve management; and provide an accessible and transparent dispute-resolution mechanism.
153. The Extension Services and Publicity Unit of the Directorate of Resource Management in TFS will work closely with the Zonal Office and relevant FNR in the development and implementation of the communication, awareness-raising and information-sharing activities under this output.
154. Each FNR Conservator will, with the support of the Zonal Office and TFS Legal Services Unit, then negotiate and conclude MOU's with the different village governments immediately proximate to the FNR. The Conservator will, in collaboration with the Project Coordinator, further facilitate and support the process of planning and fund-raising for key livelihood development opportunities linked to each MOU. Finally, the Conservator will lead the process of constituting the consolidated Reserve Advisory Committee (or similar) and ensuring that regular meetings of the committee are hosted in the reserve.
155. The Project Coordinator will, in consultation with TFS and UNDP, agree on the nature, type and scale of financial support for this output.

Output 1.4: The capacity of the TFS to plan and manage the six FNRs, as part of awider network of FNRs, is improved
156. As a newly established executive agency, TFS is still in the very early stages of institutional reform and organisational change. Work under this output will, as an integral part of thismuch larger reform and change process in TFS, seek to contribute to improving the capacity of TFS to better administer a more cohesive network of forest protected areas FNRs. Under this output, GEF funds will be used to support: improving the knowledge and skills base of FNR staff; establishing and maintaining a consolidated FNR database; and establishing a collaborative information-sharing forum for the network of FNRs.
157. The specific activities to be undertaken in this output will include the following:
(i) Facilitate a skills development and training program for targeted FNR staff and for TFS staff providing technical and professional support services to the FNRs. This may include inter alia: professional short-courses; staff exchange/mentoring partnerships with counterpart national conservation agencies; and part-time studies. The following skills and knowledge will be targeted: business planning and financial management; advanced enforcement techniques; integrated fire management; integrated IAS control; community engagement and conflict

[^19]local labour and local service providers in the:ongoing upgrade and maintenance of the network of roads and footpaths; and installation of the road and footpath signage.
150. The TFS will select and appoint anessential staff complement in each FNR. It will also ensure that office complexes, staff accommodation and ranger outposts are adequately equipped to ensure their functionality. Finally, TFS will make provision in the annual operational budgets of each FNR for the running costs of vehicles and the recurrent maintenance costs of reserve infrastructure (buildings, roads, footpaths and signage).

Output 1.3The governance of, and benefit sharing in, six FNRs is strengthened
151. This output will initially focus on raising the avareness in surrounding communities of the need to conserve, and the importance of protecting, the remaining fragments of the high forests being targeted for gazetting as FNRs. With the iterative recognition in these communities of the intrinsic value of these high forests, work under this output will then shift to collaboratively identifying potential opportunities to improve the livelihoods of those communities from the conservation and non-extractive use of the FNRs. As cooperative relationships are developed with affected local communities, the output will then seek to formalise a separate working agreement (typically in the form of a Memorandum of Understanding [MOU]) between the reserve and each adjacent village government. Activities under this output may also further seek to facilitate the implementation of these agreements, notably in respect of development opportunities for 'beneficiation' from the conservation and use of the reserve(e.g. employment; revenue sharing; rental income; capacity building; joint ventures in tourism development; equity partnerships in private sector tourism concessions; access/traversing rights; non-extractive resource use; preferential contracting; and participation in management decision-making). Finally, work under this output will support the establishment and functioning of an 'umbrella' co-management structure for the reserve, with representation from each adjacent village government and the reserve management.
152. The specific activities to be undertaken in this output will include the following:

For each FNR in the process of being gazetted, support the development and implementation of a communication and information-sharing programme in the adjacent villages.
(i) For each FNR in the process of being gazetted, support the development and presentation of informational 'road shows' to the district and regional government administrations about their proclamation, and the potential benefits of their establishment for local economic development.
(ii) For each targeted FNR that has been gazetted, support the negotiation, drafting and formalisation of an MOU ${ }^{38}$ between the FNR and each adjacent village government

[^20]141. The Survey and Mapping Department in the Ministry of Lands, Housing and Human Settlements will provide technical support to the Conservators in the in situ surveying and mapping of the FNRs.
142. The Project Coordinator will, in collaboration with the MNRT and TFS, provide financial and technical support to the MNRT Legal Unit in the drafting of the DO's and the preparation of GN's for publishing in the GG. The Project Coordinator will also, in consultation with the relevant TFS Zonal Offices and FNRs Conservators : a) procure all reserve signage and other materials (e.g. boundary markers, gate booms, slashers, chainsaws, axes); and (b) contract an international protected area planning consortium to provide specialist 'backstopping' to FNRs in the preparation of the RMP (and linked subsidiary plans) in each FNR.
143. Each FNR Conservator will source, contract and overseelabour from local conmunities in the clearing of the reserve boundaries and installation of all entry and boundary signage.
144. The TFS will nake provision in the annual operational budget of each FNR for the costs of the ongoing clearing of the reserve boundaries and regular maintenance of gates and signage.

Output 1.2: The core staffing complement, infrastructure and equipment of six FNRs is in place
145. Work under this output is focused on addressingthe critical infrastructural and equipment needs in the six targeted FNRs (Chome, Magamba, Mkingu, Minziro, Uzungwa Scarp and Rungwe). GEF funds will be used to support the: (a) basic equipping of reserve management staff; (b) renovation and construction of key reserve infrastructure; (c)installation of basic services for all staff accommodation and administration facilities; and (d) procurement and installation of critical reserve vehicles.
146. The specific activitiesto be undertaken in this output will include the following:
(i) For each forest ranger that is appointed, paid and deployed by the TFS in the targeted FNRs, procure the requisite uniform (e.g. boots, overalls, hats, insignia) and other basic safety equipment (e.g. communications, torch, backpack, binoculars, water bottles, first aid supplies).
(ii) Procure an off-roadhard topor pickup truck ${ }^{36}$, and125-250 cc off-road motorcycles, for each of the targeted FNRs.
(iii) As required, renovate and refurbish existing ranger outposts and administrative offices (including the upgrading/addition of buildings, supply of potable water, generation of power, provision of sewage and waste treatment systems and basic furnishing and equipping of outposts) in the targeted FNRs.
(iv) As required, construct new ranger outposts and administrative offices (including offices, storage area, garage, workshop, supply of potable water, generation of power, provision of sewage and waste treatment systems and basic furnishing and equipping of outposts) in the targeted FNRs.

[^21](v) Maintain/upgrade the key primary roads traversing the FNRs, including inter alia the following actions: filling ruts and holes; resurfacing; grading; water control (e.g. culverts, drains); and replacing/installing road signage.
(vi) Maintain/upgrade the main footpath network in each FNR, including inter alia the following actions: cleating of overhanging vegetation; resurfacing; repairing steps; water control (drainage); and replacing/installing footpath signage.
147. The table below provides an overview of the indicative extent and nature of GEF support to be provided under this output for each of the targeted FNRs.

Table 13: Extent and Nature of Support for the targeted FNRs under Output 1.2

| Basic FNR legal status and operational capacity to be effected by the project | Chome | Magamba | Mkingo | Minziro | Uzungwa Scarp | Rungwe |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8. Individual FNR staff are adequately equipped. | 12 | 8 | 12 | 8 | 8 | 12 |
| 9. The FNR has a basic transport capability. | $3 \mathrm{M} / \mathrm{bikes}$ | 1 off-road vehicle $3 \mathrm{M} / \mathrm{bikes}$ | 1 off-road vehicle 3 M/bikes | 1 off-road vehicle 2 M/bikes | 1 off-road vehicle $2 \mathrm{M} /$ bikes | 1 off-road vehicle 3 M/bikes |
| 10. The FNR has a basic office complex (comprising 2 offices, meeting room, toilets and kitchen) ${ }^{37}$. | 1 | Renovation/ expansion | Renovation / expansion | 1 | 1 | 1 |
| 11. The FNR has basic accommodation units for key staff ( $\sim 2-3$ staff). | - | Renovation | - | 2 | 2 | - |
| 12. The FNR has at least 2 ranger outposts for forest ranger staff. | 3 | 2 | 3 | 2 | 2 | 3 |
| 13. The key roads in the FNR are all passable. | 20km | 13km | 30km | 25 km | 30km | 40km |
| 14. The FNR footpaths are all maintained and adequately signposted. | $\begin{aligned} & 50 \mathrm{~km} \\ & (20 \text { signs }) \end{aligned}$ | $\begin{aligned} & 30 \mathrm{~km} \\ & (15 \mathrm{signs}) \end{aligned}$ | $\begin{array}{\|l} 25 \mathrm{~km} \\ (15 \mathrm{signs}) \end{array}$ | $\begin{aligned} & 35 \mathrm{~km} \\ & (15 \text { signs }) \end{aligned}$ | 40km <br> (20 signs) | $\begin{aligned} & 50 \mathrm{~km} \\ & (20 \mathrm{signs}) \end{aligned}$ |

148. The Project Coordinator will, in collaboration with the Tanzania Buildings Agency (TBA) and the TFS, contract locally orregionally-sourced architectural/civil engineering firms to project-manage the planning, construction and/or services installation for the office complexes, accomodation units, ranger outposts and road maintenance in the six reserves. The Project Coordinator will, in consultation with the relevant TFS Zonal Offices and FNRs Conservators, also procure the requisite vehicles, staff equipment and road/footpath signage for each of the reserves.
149. For each reserve where construction works are underway, the affected Conservator will: a) attend all site meetings; b) monitor and control the contracted architectural/engineering firm and their subcontractors; c) oversee the implementation of all environmental controls; and d) recommend the approval of phased payments for work completed. Each FNR Conservator will also source, contract and oversee

[^22]resolution; monitoring state of ecosystem health; basic vehicle maintenance; footpath and road maintenance; management planning; and nature-based tourism.
(ii) Establish, maintain and host an electronic spatial and non-spatial database for the network of FNRs. This may include the following actions:

- Identify and prioritise the critical information needed to support the planning and management of FNRs.
- Source and validate existing electronic (GIS, spreadsheets, images, etc.) or hard copy (maps, reports, tables, etc.) FNR-related information.
- Convert hard copy information (wherever this is practicable and cost-effective) into an electronic format.
- Design and establish a simple electronic information management system to facilitate the storage, retrieval and analysis of FNR data.
- Support the acquisition of the institutionally compatible hardware and software required to host the electronic information management system.
- Establish data access and data maintenance protocols for FNR information.
- Integrate the information management system for FNRs into the broader institutional information systems within the TFS and MNRT.
(iii) Establish and maintain a collaborative FNR working forum in which TFS staff, counterpart staff from other protected area agencies, $\mathrm{NGOs} / \mathrm{CBOs}$, research institutions and development partners can regularly meet to discuss issues related to the planning and management of FNRs.

158. The Project Coordinator will, in collaboration with TFS, contract an information management system specialist to provide technical support to the TFS in establishing an information management system for FNRs. They will also review the deliverables and approve scheduled payments of the contract. The Project will, in collaboration with the Conservators and Zonal offices, facilitate access to specific skills development and training opportunities for targeted FNR staff. Finally, the Project Coordinator will, in consultation with TFS, facilitate the constitution, hosting and logistical arrangements for the meetings of the FNR working forum.
159. The information management system specialist will be responsible for working with designated TFS staff in: identifying the scope of information needs; developing data and information collection methodologies; collating existing and new information; converting information into electronic datasets; designing and establishing an electronic information management system; identifying hardware, software and networking requirements; developing data access and maintenance protocols; and training at least 2 staff members from TFS in GIS, geospatial database administration, non-spatial data management and applications development. The Project Coordinator will consult with internal and external stakeholders in order to: source, collate and validate existing information; collect, or facilitate the collection of, new information as required. The TFS will install software, hardware and networking as required and maintain the information management system. The specialist will work closely with the designated TFS staff, and report regularly to the Project Coordinator on progress.

## Component 2: Strengthening the financial sustainability of the FNR network

160. Work under component two will be focused around three key areas of project support: (i) facilitating public-private partnerships in the commercial development of tourism and recreational facilities and services in FNRs (Output 2.1); (ii) marketing the destinations, attractions, facilities and services of FNRs (Output 2.2); and (iii) implementing other income-generating activities in targeted FNRs (Output 2.3).
161. The proposed suite of activities, and broad implementation arrangennents, for each of the three outputs are described in more detail below.

Output 2.1: The commercial development of tourism and recreational facilities and services in FNRs is implemented though public-private partnerships (PPP).
162. This output will support the implementation of large-scale tourismconcessioning(and/or leasing)processes in FNRs, throughpublic-private partnerships.Successfultourism concessions/leasesin FNRs willneed to be characterised by: the requisite competencies in TFS to administer the concession contracts and leases; the equitable selection of financially efficient and experienced concessionaires/lessees; a portion of the income from tourism user feesis paid by the concessionaire/lessee for funding conservation management of FNRs; the environmental impacts of concessioned/leased tourism facilities and services are minimized; andtangible social and economic benefitsare derived for local communities from concessions/leases.
163. The main elements of commercial tourism concessions/lease development that will be supported under this output include: (i) identifying the viable large-scale commercial tourism and recreational development opportunities in FNRs; (ii) describing how thesetonrism concession/lease opportunities in FNRs are defined, structured, priced and brought to the market; (iii) developing the internal capacity of TFS to plan and administer a concessioning/leasing process; (iv) facilitating local community involvement in, and beneficiation from, tourism concessions/lease processes; (v) soliciting tourism development proposals, and selecting and appointing suitable tourism operators; and (vi) managing tourism concession/lease contracts, once an operator is in place.
164. The specific activities to be undertaken in this output will include the following:
(i) Prepare, in consultation with a wide range of stakeholders, asubsidiary Tourism Development PIan for each FNR (see Output 1.1 above)
(ii) Identify (by location, type and scale) a suite of prospective large-scale tourism development opportunities in FNRs that could be administered under a PPP modality.Define a smaller sub-set of tourism development opportunities ( $2-4$ opportunities) for a first phase ('phase I') of the concessioning/leasing process ${ }^{40}$.
(iii) Develop a TFS Tourism Concessions Manual ${ }^{41}$ that outlines all aspects of the procurement stages, including issuing requests for proposals, choosing bidders and negotiations with preferred bidders. The TFS Tourism Concessions Manual will also include all relevant procurement

[^23]documentation, including templates for Expressions of Interest (EOI), Tender guidelines, Tender prospectuses, Requests for Proposals (RFP), Scoring systems, and Contracts. It will specifically ensure conformance with all national PPP, environmental, procurement and tourison legislation, regulations and plans.
(iv) Facilitate a skills development and training program for the professional staff in TFS who will be directly responsible for implementation of the procurement, administration and management of tourism concessions/leases.This may include inter alia: specialised training programmes; shortcourses; mentoring; and inter-institutional exchange programs.
(v) Prepare an Investment Prospectus for 'phase 1' tourism development opportunities,for distribution to prospective investors. The investment prospectus mayprovide:contextual information on the relevant FNR, including infrastructure, communities and a map of physical features; a description of the type and nature of tourism concessioning-leasing opportunity; the duration, rights and conditions of the concession-lease contract for each discrete invetsment opportunity; and the proposed tender submission date and tender fees.
(vi) Establish a ' 1 -stop shop' in TFS to guide and assist prospective investors through the 'phase 1' concessioning/lease processes.
(vii) Administer the TFS tourism concession procedures for 'phase 1', including: inviting Expression of Interest (EOI); short-listing bidders; inviting submission of full proposals; evaluating proposals; and negotiating contracts with preferred bidders.
(viii) Facilitate and support the beneficiation of local communities (see also Output 1.3) - with a special focus on women - from their involvement in commercial tourism concessions/leases, including:use of community-based tour guides; sub-contracting of community-based businesses; procurement of locally produced supplies; training and skills development; direct employment of individuals from local communities; participation in the ownership of tourism enterprise; and investment in upgrading local services (water, roads, electricity).
(ix) Oversee the construction and operational phase of each tourism concession/lease contract once the operator is in place.
(x) Improve the state of reserve access (notably the road network) to facilitate the commercial viability of each concession.
165. The Project Coordinator will, in consultation with the TFS management team, contract an international company or corporation ${ }^{42}$, specialising in nature-based tourism development and tourism PPP transactions, to provide professional and technical 'backstopping support' to the TFS in the implementation of its tourism concessioning and/or leasing processes in FNRs. This support will include: preparation of theindividual Tourism Plans in FNRs; development of a TFS Tourism Concessions Manual; skills development and training for TFS staff; preparation of the Investment Prospectus; drafting of EOIs and RFPs for tourism concession opportunities; and independent auditing of the procurement processes. The consortium will also assist the TFS in implementing an institutional (TFS, MNRT and other government agencies) and broader (e.g. NGO's, private sector, communities) consultation process to guide the iterative

[^24]formulation of the tourism plans and tourism concessions manual. The consortium will report directly to the TFS management team.
166. TFS will provide the lead in establishing and managing a centralised ' 1 -stop shop' for prospective commercial tourism investors. The affected FNR conservators will facilitate and supportoptinnising the beneficiation of local communities in commercial tourism concessions/leases. Theaffected FNR conservators will also, with the support of the relevant Zonal office, be responsible for administering the on- site contractual requirements of the tourism operators during the construction and operational phase of tourism concessions/leases. Finally, the affected Conservators will identify the concessionaire requirements for improving access to the FNR, and liaise with the district council/s about the most cost-effective means to upgrade or rehabilitate the access road/s.

Output 2.2: The destinations, attractions, facilities and services in FNRs are effectively marketed to target audiences
167. This output will focus on improving the branding and marketing of the different FNR products and services, with the overall objective of increasing the number of day and overnight visitors to the reserves.
168. The specific activities to be undertaken in this output will include the following:
(i) Create a branded visual 'identity' (including: logo; slogan; images; colours; fonts; etc.) ${ }^{43}$ for FNRs.
(ii) Incorporate the FNR visual 'identity' into all FNR communication and marketing materials (e.g. signage, uniforms, letterheads, brochures, presentation folders, stickers, fact sheets, website, advertising material, entry tickets, etc.).
(iii) Prepare a basic marketing strategy, and phased work programme, for implementation across the FNR network.
(iv) Update, and produce new, printed FNR brochures, pamphlets and information sheets.
(v) Distribute key printed marketing materials to all Tanzania Tourist Board (TTB) offices and Tanzania Tourism and Travel outlets.
(vi) Design, develop and maintain a FNR website that provides contextual information on, and markets the different tourism products and services available in, FNRs.
(vii) Facilitate communications, awareness-raising and information-sharing opportunities using different media (television, radio, magazines, newspapers, Twitter, Facebook, etc.).
(viii) Link the FNR website to the TTB and other local tourism and travel websites.
(ix) Host site-based day and overnight visits to FNRs for targeted tour operators, hotel chains and tourism agencies/associations in order to show them the range of attractions, facilities and services available in the reserves.
(x) In partnership with the Tanzania Roads Agency (TANROADS), design and install standardised directional signage to the reserves from national and regional roads.
169. The Project Coordinator will, in collaboration with TFS, retain the services ofa national marketing and communications agency to assist and support the TFS in the branding and marketing of FNRs.

[^25]170. The marketing and communications agency will, under the strategic guidance of TFS (primarily through the Zonal offices and FNRs): develop avisual identity for FNRs; prepare a marketing strategy and plan for FNRs; design/print/publish marketing materials for FNRs; maintain a liaison with the TTB, tour operators, hotel chains and tourism agencies/associations; facilitate ongoingmedia communications; and design and developa FNR website. It will facilitate any stakeholder consultation processes required in the development of the FNR branding. Finally, it will provide marketing and communications training, skills development and mentorship to at least 2 TFS-designated staff during the term of the retainer contract.
171. The TFS will host, maintain and regularly update the FNR website once it is launched. The TFS will also work closely with TANROADS in the design and installation of directional signage to the FNRs.
172. The FNR Conservators will arrange the logistics for, and host, the day and ovemight visits to FNRs by local tour operators, hotel chains and tourism agencies.

## Output 2.3: Other income-generating activities in targeted FNRs are identified and tested.

173. This output will focus on assessing the feasibility of a range of different funding mechanisms/tools for FNRs. Based on the results of this assessment, it will identifya set of key actionsthat will be required to mobilize financial resources for, and build financial capacity in, FNRs. A medium-term Financial Plan will be developed to provide the strategic framework for the prioritized implementation of these key actions. Based on preliminary work undertaken during the preparatory phase, this output will also finance the implementation of a number of potential income-generating opportunities in order to assess the viability of these funding mechanisms.
174. The specific activities to be undertaken in this output will include the following:
(i) Review and select the most appropriate mechanisms to improve revenue streams for FNRs. This may include: (a) increasing the current income from conventional financial sources (e.g. government grants, entry fees, user fees, fines, development partner funding, trust funds); (b) developing new funding sources (e.g. tourism/recreation concessions ${ }^{44}$, joint commercial ventures, biodiversity offsets, PES, carbon funds, special events, bioprospecting patents); and/or (c) improving cost-efficiencies (e.g. centralization of common functions, eliminating duplication, outsourcing functions; improving service delivery, public-private-community-NGO partnerships, 'smart card' system for local visitors/users).
(ii) Identify and describe the critical activities that would be required to: (a) improve the current levels of investment in FNRs; (b) mobilize additional financial resources for FNRs; (c) strengthen financial management systems in the FNR network; and (d) improve business planning capabilities in the FNR network.
(iii) Prepare a medium term Financial Plan that establishes lines of strategic action to mobilize financial resources and build the financial capacity of the FNR network.
(iv) Enter into a joint commercial venture (i.e.community-reserve) to:

[^26]a. Establish and maintain apiaries on the borders of the FNRs located in the country's high producing areas in order to collect, bottle, label and distribute FNR-community brandedmontanehoney and beeswax;
b. Establish and maintain butterfly farms on the borders of FNRs to collect, farm, transport and export FNR-community branded butterfly pupae to butterfly exhibitors (refer to http://www. amanibutterflyproject.org/farming.htm for further information).
(v) Provide afund raising service that will support TFS and FNRs in: identifying projects for external funding; targeting potential funders for these projects; preparing detailed funding proposals; liaising with different development partners and other prospective funders; and building working partnerships with development partners and other prospective funders.
(vi) Assess the feasibility of including a voluntary or compulsory'conservation levy, ${ }^{45}$ inthe municipal water authority charges for water supply from natural forested catchment areas that are under some form of active conservation management ${ }^{46}$.
175. The Project Coordinator will, in consultation with the TFS, contracta financial planning firm to: (a) prepare the Financial Management Plan for FNRs; (b) assist in implementing fund-raising activities for FNRs;(c) prepare business plans for joint venture beekeeping and butterfly farming projects in FNRs; and (d) assess the feasibility of levying a conservation fee on municipal water charges. The Project Coordinator will, in consultation with the TFS management team, also facilitate access to specialized skills development and training in butterfly farming, beekeeping and business management for targeted FNR staff and community members.
176. The Bee Reserves and Apiaries Division of TFS will provide technical support to FNRs in the establishment and management of apiaries in FNRs.
177. The FNR Conservators will, with the technical and professional support of the Bee Reserves and Apiaries Division of TFS and the contracted financial planning firm, facilitate the conclusion of joint venture agreements with communities (as part of the village-based MOUs - see Output 1.3 above) and administer the in situ establishment and management of honey and beeswax production and butterfly farming operations. The Conservators and communities may opt to employ a dedicated management team, NGO, NPO or private service provider (from the proceeds of the commercial operations) to administer the commercial ventures in each $\mathrm{FNR}^{47}$.

## INDICATORS AND RISKS

178. The project indicators are detailed in the Strategic Results Framework which is attached in Section II of this Project Document.
179. Project risks and risk mitigation measures are described below.
[^27]Table 14: Project Risks and Mitigation Measures


| Identified Risks AND CATEGORY | Impact | Likelihood | RISK Assessment | Mitigation Measures |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | livelihood development opportunities that are explicitly identified in these MOUs (Output 1.3). More specifically, the project will support the implementation of commercial joint ventures between the private sector, TFS and communities inthe provision of large-scale tourism enterprises in FNRs(Output 2.1) and commercial bee and butterfly farming (Output 2.3). <br> Finally, the project will facilitate the establishment of a formal joint co-management structure in the targeted FNRs (Output 1.3) that can inter alia: facilitate broader community and local government participation in the reserve management decision-making; agree on reservewide regulations required to control community access to the reserve's natural resources; collectively enforce tenure and natural resource use agreements between the community and reserve management; and provide an accessible and transparent dispute-resolution mechanism. <br> Collectively it is envisaged that these activities will improve the cooperative collaboration with, and iterative 'buy-in' from, communities living in villages adjacent to (or within FNRs. |
| FINANCIAL <br> The Government and TFS do not commit adequate resources and funding to significantly improve the management effectiveness of FNRs. This may, in turn, limit the interest of the private sector in investing in large-scale tourism concessions in FNRs. | moderate | MODERATELY LIKELY |  | The project outputs have been identified, and project activities developed, in close collaboration with the MNRT and the TFS in order to incrementally build on the existing foundation of financial resources and institutional capacities. Careful attention has been paid in project design to improving the long-term financial sustainability of the FNRs so that sufficient funding remains available for their ongoing conservation management. <br> The project will support the preparation of a financial plan for FNRs (Output 2.3). This financial plan will provide the overarching strategic framework for improving cost efficiencies, increasing revenue streams, strengthening financial management systems, and improving business planning capabilities in the FNRs. <br> The project will then support the implementation of key elements of the financial plan, as follows: <br> - Facilitating public-private partnerships in the commercial development of tourism and recreational facilities and services in FNRs (Output 2.1); <br> - Developing the branding for, and expanding the scope and range of the marketing of, FNRs and their unique tourism and recreational products and services (Output 2.2); <br> - Entering into joint commercial ventures with village |


| Identified Risks and Category | Impact | Likelihood | Risk Assessment | Mitigation Measures |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | governments to farm, transport and sell FNR- <br> community branded montane honey, beeswax and butterfly pupae (Output 2.3); <br> - Supporting the development and administration of targeted fund-raising for FNRs (Output 2.3); <br> - Assessing the feasibility of including a voluntary or compulsory'conservation levy' in the municipal water authority charges (Output 2.3); and <br> - Facilitating skills development and training programs for targeted TFS and FNR staff in business planning and financial management (Output 1.3). <br> It is envisaged that collectively these activities will contribute to incrementally reducing the dependency on government grant allocations, and closing the 'funding gap' for improving management effectiveness (notably in respect of conservation management), for FNRs. <br> The project will also support securing the conservation status of the FNRs (proclamation, entry points, boundary demarcation, enforcement), developing a basic operational capacity (staffing, training, equipment, vehicles) for FNRs and constructing/upgrading basic infrastructure (roads, footpaths, signage, offices, ranger outposts) in FNRs. Further, the project will invest in improving the working relationships with households and village governments located adjacent to FNRs. This project investment should then create a more stable, enabling environment for private sector investment in FNRs. |
| ENVIRONMENTAL <br> The effects of climate change further exacerbates the fragmentation of high forests in FNRs, leading to an increase in the vulnerability of endemic forest species | LOW | UNLIKELY |  | It is recognised that there are potential risks to FNRs from climate change, as the climate is predicted to become somewhat drier and hotter, which might impact on the montaneforests and their ability to support a number of endemic plant and animal species. However, the climate change models for this region are still crude, and areonly now in the process of being downscaled to the sub-national level. There isconsiderable uncertainty around what will actually happen in Tanzania under different climate change scenarios. For the montaneareas some of the species present are millions of years old, and have survived a number of pastclimatic shocks. It is likely that there may be unique features of the species, the forests, or the topography ofthe mountains that makes it possible for species to survive in the longer term. <br> The specifics of which FNR will be adversely affected, and how, is still very difficult to predict. The 11 FNR are also all in some way connected to wider ecological habitats (e.g. |


| IDENTIFIED RISKS and Category | ImPact | Likelihood | RISK Assessment | Mitigation Measures |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | those in the Pare and Usambara blocks to the north are well integrated with other montane forest areas; those in the Uluguru and Udzungwa mountain blocks are surrounded by miombo; those in Rondo and Mount Rungwe are also surrounded by miombo), thus limiting their vulnerability. <br> During the implementation phase, the project will however maintain close links to academic institutions studying climate change (and its effects on forest biodiversity) in order toidentify any key adaptation and/or mitigation measures that may be required to safeguard FNRs against the undesired effects of climate change. <br> The project will also - as an integral part of the development of the electronic information management system for FNRs (Output 1.4) - assist TFS in defining indicators of forest ecosystem health in FNRs, and quantifying the thresholds of potential concern for each indicator. This will then enable FNR staff to collect the critical data needed to objectively assess the incremental impacts of climate change on forest ecosystems, and for TFS to then develop strategic responses to mitigate or adapt to any fragmentation effects and/or species loss. |

## Cost-Effectiveness

180. The project's cost effectiveness is premised on: (i) making a catalytic investment by developing key infrastructurein, and procuring critical equipment for,the targeted FNRs in order to reduce the recurrent annual operational costs of their management; (ii)improving the working relationships with adjacent communities in order to incrementally reduce the recurrent costs of monitoring and enforcing illegal activities occurring in FNRs; (iii) developing the financial planning capacities in order to provide the groundwork for improving the future long-term financial viability of the FNR network; and (iv) improving revenue for FNRs by strengthening existing, and developing new, financial mechanisms.
181. The project is thus considered cost-effective for the following primary reasons:
182. Using financial data from recent investments by the government and development partners in Kilombero, Nilo and Uluguru FNRs, it is conservatively estimated that the initial (i.e. over a period of the first $\sim 3-4$ years) capital expenditure costs and operating costs of establishing a basic, functional administrative structure for a FNR is in the range of US $\$ 12$ to US $\$ 20 /$ ha/annum. Once an administrative structure is in place however, the ongoing capital and recurrent operational costs of sustaining this administrative capacity are significantly reduced to levels of $\sim$ US $\$ 4$ to US $\$ 7 / \mathrm{h} /$ annum beyond year 4 . So a catalytic investment by GEF in the initial start-up costs of establishing a basic management capability in the six targeted FNRs will reduce the recurrent costs to government of maintaining this investment (by a factor of $\sim 3$ ).
183. Project support towards initiating a process of incrementally building a collaborative and cooperative relationship between each target FNR and the different village government and communities living around
the reserve, will yield both long-term conservation benefits (e.g. mitigating impacts on reserve habitats and species through formalising agreements on: access to natural resources during the transitional period after gazetting; enforcing controls on encroachments into the reserve; monitoring of illegal activities in the reserve; mitigating the impacts of human-induced fires) and an increnental improvement in the living conditions of communities living in and around the reserves (e.g. improved public infrastructure and services; direct employment; access to development funding; training and skills development; income from joint commercial ventures; tourism entrepreneurial opportunities; safety and security; alternative livelihood support).
184. A comparatively small investment by the project in developing an output-based, results-oriented reserve management plan (and associated subsidiary plans and APOs) for each target FNR will ensure the optimal deployment of limited institutional resources and capacity in the future management of the reserve.
185. Project support toward the focused improvement of the proficiency and skills of reserve staff will ensure that the productivity and effectiveness of the limited human resources is enhanced and optimally organized. The initiation of a mentoring and staff exchange programme with counterpart conservation agencies will further incrementally improve FNR staff capacities.
186. Project funding for the implementation of large-scale tourism concessioning processes in FNRs, through public-private partnerships, will significantly contribute to: (a) increasing income to reserves from tourism concession fees; (b) reducingexposure to the risk ofconstructing and operating tourism facilities; (c)diversifying the tourism and recreational products in FNRs; (d) improving the quality of the tourism products and services; (e) increasing the length of stay of visitors to FNRs; and (f) providing an alternative source of revenue and employment for rural communities living in and surrounding the reserves. The additional income from concession fees will then be used to subsidise an incremental improvement in the quality and extent of conservation management activities in the FNR.
187. Project funding for the design, development, construction and operation of joint venture (community-FNR) beekeeping and butterfly farming enterprises in the FNR buffer areas would result in a sustainable source of revenue and employment for the local community and income for the reserves. It is projected that these joint ventures across selected FNR would, after an initial start-up period of 2-3 years, collectively generate at least US $\$ 20,000-30,000$ net income per annum to TFS for re-investment back into the conservation management of FNRs.
188. Project investments in the piloting of voluntary or compulsory'conservation levy' in the municipal water authority charges for water supply from natural forested catchments could, if successfully implemented, be replicated across the country over the medium- to long-term. While the initial financial returns from any pilot would be modest (likely to only cover the ongoing management and administration costs) the scaling up of PES opportunities could generate significant revenues in the longer-term, a proportion of which could be ring-fenced' for FNR operational costs or capital investment costs.
189. A small project investment in supplementing the fund-raising capacity of the FNR network, couldby year 3 - conservatively generate an additional investment of at least US $\$ 1$ million/annum from donors to support the planning and management of FNRs.
190. Wherever possible, the project will use the competencies and technical skills within the mandated government institutions to implement project activities. Where applicable, project resources will also be deployed to strengthen and expand existing initiatives and programmes in and around FNRs to avoid
duplication of effort. Further, increased co-financing commitments will continue to be targeted by the project during the project implementation.
191. The project strategy was selected following a review of alternative investments that could have generated equivalent global environmental benefits. One option was to develop a larger sustainable forest management project, looking at forest conservation across larger forest landscapes and geared additionally towards land use, land use change and forestry (LULUCF). This was discardedbecause there is an urgent unmet need to strengthen the FNR network for biodiversity conservation by bringing new sites into the system and strengthening the institutional capacities of the management authority. The Government determined that at this point, a more focused approach would best address these immediate needs. Moreover, there is a large baseline investment already supporting LULUCF in Tanzania-financed by NORAD, UN-REDD, the WB FCPF, DFID and other actors. This work is already well advanced. Rather than invest further in LULUCF, the Government has thus decided to overlay BD management onto it. Once a crediting scheme is in place, opportunities exist to catalyse funding for carbon stock conservation and sequestration within the FNR network.

## Country Ownership: Country Eligibility and Country Drivenness

192. The Government of Tanzania ratifiedthe United Nations Convention on Biological Diversity (CBD) on the $8^{\text {th }}$ of March 1996 and the UN Framework Convention on Climate Change (UNFCCC) on the $17^{\text {th }}$ of April 1996.Tanzania has also ratified a number of other related conventions, including the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES); the Ramsar Convention; the World Heritage Convention; and the UN Convention to Combat Desertification (UNCCD).
193. The project will fulfil a number of the objectives of the CBD, including the in situ conservation of biodiversity and the enhancement of national capacities to manage natural ecosystems. More specifically, the project addresses elements 3 and 4 of the CBD COP VII decision on Protected Areas, and the accompanying Programme of Work on Protected Areas (PoWPA) (COP 7, Decision VII/28).
194. The Fourth National Report (2009) has been prepared by the country in conformance with COP 8 decision VIII/14 of the CBD. This report emphasises the high priority placed by the government on the establishment and management of Forest Nature Reserves as an effective mechanism for the in situ conservation of montane forest biodiversity ${ }^{48}$.
195. Tanzania's Vision 2025and the complementary National Strategy for Growth and Reduction of Poverty (NSGRP II or "MKUKUTA"),stresses the importance of developing a fully representative system of protected areas and highlights the imperative of ensuring conformance between the management of these protected areas and local governance systems for land use inanagement.
196. The National Biodiversity Strategy and Action Plan (NBSAP, 2001) has, as its highest priority, the need to'conserve core areas of high biodiversity value and species habitats, including fragile ecosystems such as ... mountainous areas ...through ... protected areas'. The NBSAP underscores the importance of forest conservation, identifying key forest areas that need to be conserved to safeguard constituent biodiversity.

[^28]197. This project has been selected as an investment priority by the Tanzanian government following an extensive national stakeholder consultation exercise that assessed not only current needs, but also the extent that current investments build upon, and add value to, other GEF investments in conservation.

## Linkages to UNDP Country Programme

198. The United Nations Development Programme's (UNDP) work on biodiversity and ecosystems involves integrating biodiversity into development, unlocking the potential of PAs and ecosystem-based mitigation of/ and adaptation to climate change, in order to secure livelihoods and the provision of food, water and health. It aims to enhance resilience of ecosystems and biodiversity, conserve threatened species and their habitats; reduce vulnerability to climate change and increase carbon storage and sequestration. UNDP's comparative advantage lies in its capacity to support governments in accessing finance, encouraging innovation for development and provide technical and legal advice.
199. In its ecosystems and biodiversity portfolio, UNDP draws on its extensive technical expertise and experience in successfully supporting inter-country and country-level programming for biodiversity management. The UNDP's biodiversity and ecosystems portfolio contains 512 projects, working in 146 countries. The UNDP's Biodiversity and Ecosystems Framework for 2012-2020 organises its work into three signature programmes which contribute to its overall strategic objective to Maintain and enhance the goods and services provided by biodiversity and ecosystems in order to secure livelihoods, food, water and health, enhance resilience, conserve threatened species and their habitats, and increase carbon storage and sequestration. The three signature programmes are:

- Integrating biodiversity and ecosystem management into development planning and production sector activities to safeguard biodiversity and maintain ecosystem services that sustain human wellbeing.
- Unlocking the potential of protected areas, including indigenous and community conserved areas, to conserve biodiversity while contributing towards sustainable development.
- Managing and rehabilitating ecosystems for adaptation to and mitigation of climate change.

200. UNDP partners with the GEF, national and local governments, NGOs and CBOs to fund and implement projects in these thematic areas. GEF-funded projects and activities are integrated into UNDP's progranme of work on environment and energy.
201. UNDP is well placed to support countries in integrating biodiversity and ecosystems management into development processes. With its on-the-ground presence, local knowledge, and ability to promote the important interface between local, national, and global communities and scientific researcb, UNDP assists developing countries in removing barriers to effective biodiversity and ecosystems management based on their national priorities and strategies, and improving system capacity through integrated policy development, institutional strengthening, and non-governmental and community participation.
202. UNDP has been active in the field of biodiversity conservation in Tanzania for over 40 years, collaborating for instance with FAO in 1965 to establish the Mweka Wildlife College. UNDP bas supported efforts to strengthen forest management in the country for over 20 years, and amongst other things presently serves as the in-country coordinator for UN REDD initiatives and chairs the Development Partners Group (DPG) in Tanzania.
203. Strategically, in terms of the UNDP Tanzania country programme, the project fits within the UNDAF Outcome 8: Relevant MDAs, LGAs and Non-State Actors improve enforcement of environment laws and regulations for the protection of ecosystems, biodiversity and the sustainable management of natural resources and all three outputs therein.
204. The Country Office maintains an environment unit, staffed by a core team of three professional plus supportive operations staff-well equipped to manage this initiative. The Regional Technical Advisor for Biodiversity based in Addis Ababa will supply specialised technical support as needed.
205. Overall, UNDP is well positioned to provide implementation support to the design and implementation of the adaptation measures at the community level, and on policy and institutional mainstreaming of adaptation. This is largely owing to its country presence, its coordination mandate, its established networks and its working relationships in-country.

## LINKAGES WITH GEF-FINANCED PROJECTS

206. This initiative forms part of a suite of GEF supported initiatives that aim at biodiversity conservation. The project will collaborate closely with other related initiatives in Tanzania supported by both GEF and other co-financiers.

Table 15: Additional GEF Approved Projects in Tanzania

| GEF ID | Country | Project Name | Focal Area | Agency | Project Type |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3428 | Tanzania | SFM extending the Coastal Forests Protected Area Subsystem | Biodiversity | UNDP | FP |
| 3695 | Tanzania | Strengthening the Protected Area <br> Network in Southern Tanzania: <br> Improving the Effectiveness of National <br> Parks in Addressing Threats to <br> Biodiversity | Biodiversity | UNDP | FP |

207. This project will collaborate closely with, and build on the findings of, other GEF projects in Tanzania, without repeating the efforts made in those projects. Notably, these are:

SFM extending the Coastal Forests Protected Area Subsystem:The aim of the project is to strengthen biodiversity management fundamentals within the Protected Area network in Tanzania. This project addresses the Coastal Forests which are argnably the most threatened of all hotspots ecosystems in Tanzania and Zanzibar islands. The governance framework is going to be deeply revised at national and district levels to extend the Protected Area network. Different legal, regulatory, financial and institutional tools are going to be renewed to implement an effective conservation management in protected areas and sustainable approaches with forest-adjacent communities. The project will pilot novel institutional arrangements and partnerships in three priority landscapes (Zanzibar, Kichi-Matumbi Hills, greater Rondo system on the Tanzanian mainland).

Strengthening the Protected Area Network in Southern Tanzania: Improving the Effectiveness of National Parks in Addressing Threats to Biodiversity: This project being implemented by the Tanzania National Parks (TANAPA) and Ministry of Natural Resources and Tourism, Tanzania with the aim ofensuring that the biodiversity of Southern Tanzania is better represented and buffered from threat within National Parks.

## Project consistency with national priorities/Plans

208. The project will support the implementation of the 'Forest Management and Conservation Program' of the National Forest Program (NFP, 2001-2010), particularly strategy 7.4.5(vi). It will also assist in the implementation of sections of the 'financing strategy for the NFP, notably in the implementation of the mechanism identified in 7.7.5.2 of the NFP (i.e. 'eco-tourism assessment and mapping of potential areas/sites for eco-tourism; promotion of identified sites to encourage private sector and communities to develop eco-tourism products and services; regulations and guidelines for eco-tourism; basic infrastructure in place to attract investments'). All the sites forming the locus for project activities are fully aligned with the high biodiversity value montane sites requiring increased conservation investment that are identified in sub-programme 7.4.4.2 of the NFP. The establishment of an information management system for FNRs will also contribute to addressing the needs identified under sub-programme 7.4.4.4 ('Forest resources information and management planming') of the NFP.
209. The project is consistent with the NFP strategies for Joint Forest Management, and will fully conform to the draft Guidelines for Participatory Forest Resource Assessment and Management Planning (2004, as updated and revised).
210. The project will directly support the implementation of Strategy (i) of Objective C ('Stable ecosystem and biological biodiversity maintained') of the Tanzania Forest Service Strategic Plan (TFS SP 2010-2013). It will specifically assist the TFS in addressing the following performance target areas: strengthen law enforcement capacity; train forest conservation staff; prepare reserve management plans; develop information database; and implement PFM. Project indicators are also closely linked to the TFS SP indicators (forest cover; increase in income/annum; number of illegal incidents; select species population distribution/numbers) to ensure consistency in data collection and reporting.
211. The project will contribute to the implementation of the National Climate Change Strategy (NCCS, 2012). More specifically, it will improve adaptive capacity in the Forestry Sector by 'enhancing conservation of forests biodiversity and control of invasive species' (Strategic Intervention3b) and 'supporting alternative livelihood initiatives for forest dependent communities' (Strategic Intervention 3c). It will also strengthen the adaptive capacity of the Tourism Sector by 'promoting alternative tourism destinations' (Strategic Objective 7a).
212. The project will support the implementation of a number of the strategic actions required to address the drivers of deforestation and forest degradation that are identified under KRA 10 of the National Strategy for Reduced Emissions from Deforestation and Forest Degradation (2013).
213. The project is also broadly aligned with the Action Programmes 'Attracting capital investment' and 'Enhancing and expanding the tourism product' of the Integrated Tourism Master Plan for Tanzania(2002).

## Sustainability and Replicability

214. The project has been carefully designed to optimize prospects for improving the sustainability of the network of nationalprotected areas in the following areas:
215. Environmental sustainability will be promoted in the project byimproving the effectiveness of conservation efforts in protecting the indigenous species, habitats and ecological processes across Tanzania's sub-network of FNRs. The project will further support the expansion of the network of FNRs in order to ensure that all high biodiversity forest cco-rcgions in the country will have at least one FNR conserving representative samples of its forest species and habitats. Environmental sustainability will be indirectly promoted by the project through increasing the financial resources available for the conservation management of FNRs. Improved revenue streams will enable tbe implementation of more effective mitigation measures to reduce the threats to native biodiversity contained in the FNRs and their buffer areas. The project will also facilitate the preparation of Reserve Management Plans (and their associated subsidiary plans) to ensure that a balance is maintained between the conservation of the biodiversity and heritage values of the reserve, the protection of native plants and animals in the reserves, and the rights of adjacent communities and other users to benefit from, and access and use, the reserve. Project investments will collectively contribute - in the medium to long-term - to restoring the indigenous forests, containing the spread of wildfires and IAS, reducing the impacts of erosion, controlling illegal harvesting of natural and mineral resources, and preventing further removal of native forests for subsistence agriculture in the biodiversity-rich high forest ecosystems, in the gazetted FNRs.
216. Institutional sustainability will be achievedby strengthening the institutional and individual capacities of the newly established Tanzania Forest Services (TFS) to administer the network of FNRs.The institutional sustainability of TFS to fulfil its conservation mandate for FNRs will largely be founded on its capacity to: (i) conceptualise and formulate FNR policies, regulations, strategies and programmes; (ii) fund and implement FNR policies, regulations, strategies and programmes; (iii) engage and build consensus among all stakeholders in the planning and management of FNRs; (iv) mobilise key information and knowledge; and (v) continually monitor, evaluate, report and learn from doing. The project will then contribute to improving the capacities of TFS in the following key areas: supporting the preparation of reserve management and development plans; securing the boundaries and entry points of FNRs; supplementing the core staffing complement, infrastructure and equipment in FNRs; strengthening the governance of FNRs; consolidating and improving the baseline knowledge of the FNR network; developing the skills and knowledge base of TFS staff; and improving the coordination and collaboration between individual FNRs.
217. Financial sustainability will be achieved by supporting the development and implementation of a Financial Plan for the FNR network.The project will specifically assist in the design and implementation of mechanisms to increase and diversify financial flows to FNRs, including: improving revenue from entry and other user fees; targeting additional focused donor funding support;facilitating public-private partnerships in the large-scale commercial development of tourism and recreational facilities and services in FNRs; developing and implementing commercial joint ventures with local conmunities in bee and butterfly farming enterprises along the reserve boundaries; and assessing the feasibility of introducing a conservation levy in municipal water charges to offset management costs associated with the conservation of water catchment forests. The project will also support the continued introduction of business planning processes in the FNRs, with direct links to the preparation of Reserve Management Plans and Annual work plans.
218. Social sustainabilitywill be enhanced by the project through the direct involvement of the private sector, local communities and NGOs in the ongoing conservation of, provision of services in, and sustainable resource use from FNRs - notably though partnerships, co-management and co-operative

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218. Social sustainabilitywill be enhanced by the project through the direct involvement of the private sector, local communities and NGOs in the ongoing conservation of, provision of services in, and sustainable resource use from FNRs - notably though partnerships, co-management and co-operative
governance arrangements. In particular, the project will seek to optimise entrepreneurial and direct employment opportunities for the communities living in villages adjacent to the FNRs. This will include: (i) the creation of permanent and part-time employment opportunities (e.g. boundary clearing, construction activities, road and footpath maintenance, nature-based tourism activities, reserve staff); (ii) partnering in the planning, implementation and beneficiation from commercial activities occurring in FNRs (e.g. bee and butterfly farming, nature-based tourism and recreation); and (iii) assisting village governments to raise funding support for the development and implementation of more sustainable income-generating opportunities outside FNRs. The project will also support the establishment and functioning of cooperative governance mechanisms that will facilitate community and village government in reserve management decision-making processes (e.g. concluding MOUs with village governments, establishing reserve management advisory committees), and enable the reserve management teams to work with surrounding villages in collaboratively seeking solutions for improving the balance between the needs of adjacent communities and the biodiversity conservation objectives of the affected reserve. The involvement of stakeholders in project activities - at both the level of the protected area network and individual protected areas - will be guided by robust stakeholder engagement plans. These stakeholder engagement plans will also make strong provision for conflict management with different categories of user groups. In line with UNDP policies, attention will be paid to gender equity, and in particular to ensure the full participation of women in all project activities.
219. Replication will be achieved through the direct replication of selected project elements and practices and methods, as well as the scaling up of experiences. The project will specifically use the lessons learnt from the: updating of the Reserve Management Plan (and associated annual work, subsidiary and business plans) (Output 1.1, 2.1 and 2.3); implementation of Phase 1 of the tonrism concessioning process (Output 2.1); establishment of Reserve Management Advisory Committees (Output 1.3); establishment and operations of commercial joint venture butterfly and bee farms (Output 2.3); and the piloting of the conservation levy in municipal water authority charges in the future phased roll-out of these approaches, technologies and systems across the entire network of FNRs. It is anticipated that the government will use the results of the concessioning processes in FNRs to further adapt and reform its PPP approaches across all categories of PAs in Tanzania.Project activities will contribute to the global evidence base of the costeffectiveness of different community-based partnership approaches in and around protected areas. Information generated from this cost-benefit analysis will be used to refine and update community-based partnership approaches in other PAs across the country to ensure optimal returns for conservation funds invested.
220. Each project output will include the documentation of lessons learnt from implementation of activities under the output, and a collation of the tools and templates (and any other materials) developed during implementation. The Project Coordinator will ensure the collation of all the project experiences and information. This knowledge database will then be made accessible to different stakeholder groups in order to support better future decision-making processes in protected areas and more consistent adoption of best practice.

## PART III: Management Arrangements

## PROJECT IMPLEMENTATIONARRANGEMENT

221. The project will be implemented over a period of five years in line with HACT.
222. The UNDPCountry Office will monitor the implementation of the project, review progress in the realisation of the project outputs, and ensure the proper use of UNDP/GEF funds. Working in close cooperation with TFS, the UNDP Country Office (CO) will provide support services to the project including procurement, contracting of service providers, human resources management and financial services - in accordance with the relevant UNDP Rules and Procedures and Results-Based Management (RBM) guidelines.
223. The project will be nationally implemented (NIM) by theTanzania Forest Services (Ministry of Natural Resources and Tourism) in line with the Standard Basic Assistance Agreement (SBAA of 30 May, 1978) and the United Nations Development Assistance Plan (UNDAP, 2011-2015).
224. The TFS will have the overall responsibility for achieving the project goal and objectives.Itwill be directly responsible for creating theenablingconditions for implementation of all project activities. TFS will work in close cooperation with the Vice President's Office (VPO), as the GEF Focal Point, and the Ministry of Natural Resources and Tourism (MNRT). TFS will also coordinate activities on a local landscape level with the Office of the Prime Minister, Regional and Local Government (PMORALG) through direct engagement with district and regional government offices.
225. The TFS will designate the Head of the Natural Forest Section (NFS), under the Directorate of Resources Management (DRM),to act as the Project Director (PD). The PD will provide the strategic oversight and guidance to project implementation ${ }^{49}$.
226. The day-to-day administration of the project will be carried out by a national Project Coordinator(PC), with the support of aProject Administrative Assistant (PAA). The PC has the authority to administer the project on a day-to-day basis on behalf of TFS, within the constraints laid down by the Project Steering Committee (PSC). The PC's prime responsibility is to ensure that the project produces the results specified in the project document, to the required standard of quality and within the specified constraints of time and cost. The PC will prepare Annual Work Plans (AWP) in advance of each successive year and submit them to the Project Steering Committee for approval.The PC will liaise and work closely with all partner institutions to link the project with complementary national programs and initiatives. The PCis accountable to the PD for the quality, timeliness and effectiveness of the activities carried out, as well as for the use of funds. The PAA will provide project administration support to the PC, as required. The terms of reference for the PC and PAA are detailed in Section IV. Part I.
227. The PCwill be technically supported by contracted national and international service providers.Recruitment of specialist support services and procurement of any equipment and materials for the project will be done by the PC, in consultation with the PD and in accordance with relevant recruitment and procurement rules and procedures. The terms of reference of the key national and international service providers to be contracted by the project are detailed in Section IV, Part I.
228. A Project Steering Committee (PSC) will be constituted to serve as the executive decision making body for the project.While the final composition of the PSC will be determined at the Project Inception
[^29]Workshop (see Section I, Part IV), it will include representation from the MNRT, VPO, UNDP and PMORALG. The Project Steering Committee will ensure that the project remains on course to deliver the desired outcomes of the required quality. The PSC will meet at least twice per annum (more often if required).
229. The PCwill produce an Annual Work Plan (AWP) to be approved by the PSC at the beginning of each year. These plans will provide the basis for allocating resources to planned project activities. Once the PSCapproves the AWP, this will be sent to the UNDP Regional Technical Advisor for Biodiversity at the GEF Regional Coordinating Unit (RCU) for clearance. Once the AWP is cleared by the RCU, it will be sent to the UNDP/GEF Unit in New York for final approval and release of the funding. The PC will further produce quarterly operational reports and Annual Progress Reports (APR) for review by the PSC, or any other reports at the request of the PSC. These reports will summarize the progress made by the project versus the expected results, explain any significant variances, detail the necessary adjustments and be the main reporting mechanism for monitoring project activities.

## Financial and other procedures

230. The financial arrangements and procedures for the project are governed by the UNDP rules and regulations for National Implementation Modality (NIM). All procurement and financial transactions will be governed by applicable UNDP regulations under NIM.

## Audit CLAUSE

231. The Project audits will be conducted according to UNDP Financial Regulations and Rules and applicable Audit policies.

## PART IV: Monitoring Framework and Evaluation

## MONITORING AND REPORTING

232. The project will be monitored through the following Monitoring and Evaluation (M\&E) activities.

## Project start-up:

233. A Project Inception Workshop will be held within the first 4 months of project start with those with assigned roles in the project organization structure, UNDP country office and where appropriate/feasible regional technical policy and programme advisors as well as other stakeholders. The Inception Workshop is crucial to building ownership for the project results and to plan the first year annual work plan.
234. The Inception Workshop should address a number of key issues including:
a) Assist all partners to fully understand and take ownership of the project. Detail the roles, support services and complementary responsibilities of UNDP CO and the UNDP-GEF Regional Office vis-à-vis the project team. Discuss the roles, functions, and responsibilities within the project's decision-making structures, including reporting and communication lines, and conflict resolution mechanisms. The Terms of Reference for project staff will be discussed again, as needed.
b) Based on the project results framework and the relevant GEF Tracking Tool, if appropriate, finalize the first AWP. Review and agree on the indicators, targets and their means of verification, and recheck assumptions and risks.
c) Provide a detailed overview of reporting, monitoring and evaluation ( $\mathrm{M} \& \mathrm{E}$ ) requirements. The Monitoring and Evaluation work plan and budget should be agreed and scheduled.
d) Discuss financial reporting procedures and obligations, and arrangements for annual audit.
e) Plan and schedule Project Steering Committeemeetings. Roles and responsibilities of all project organization structures should be clarified and meetings planned. The first Project Steering Committeemeeting should be held within the first 6 months following the inception workshop.
235. An Inception Workshop report is a key reference document and must be prepared and shared with participants to formalize various agreements and plans decided during the meeting.

## Quarterly:

- Progress made shall be monitored in the UNDP Enhanced Results Based Management Platform.
- Based on the initial risk analysis submitted, the risk log shall be regularly updated in ATLAS. Risks become critical when the impact and probability are high.
- Based on the information recorded in ATLAS, a Project Progress Report (PPR) can be generated in the Executive Snapshot.
- Other ATLAS logs can be used to monitor issues, lessons learned etc. The use of these functions is a key indicator in the UNDP Executive Balanced Scorecard.


## Annually:

Annual Project Review/Project Implementation Reports (APR/PIR): This key report is prepared to monitor progress made since project start and in particular for the previous reporting period. The APR/PIR combines both UNDP and GEF reporting requirements.

The APR/PIR includes, but is not limited to, reporting on the following:

- Progress made toward project objective and project outcomes - each with indicators, baseline data and end-of-project targets (cumulative)
- Project outputs delivered per project outcome (annual)
- Lesson learned/good practice
- AWP and other expenditure reports
- Risk and adaptive management
- ATLAS Quarterly Progress Reports (QPR)
- Portfolio level indicators (i.e. GEF focal area tracking tools) are used by most focal areas on an annual basis as well.


## Periodic Monitoring through site visits:

236. UNDP CO and the UNDP RCU will conduct visits to project sites based on the agreed schedule in the project's Inception Report/Annual Work Plan to assess first hand project progress. Other members of the Project Steering Committeemay also join these visits. A Field Visit Report/BTOR will be prepared by the CO and UNDP RCU and will be circulated no less than one month after the visit to the project team and Project Steering Committeemembers.

## Mid-term of project cycle:

237. The project will undergo an independent Mid-Term Evaluation at the mid-point of project implementation. The Mid-Term Evaluation will determine progress being made toward the achievement of outcomes and will identify course correction if needed. It will focus on the effectiveness, efficiency and timeliness of project implementation; will highlight issues requiring decisions and actions; and will present initial lessons learned about project design, implementation and management. Findings of this review will be incorporated as recommendations for enhanced implementation during the final half of the project's term. The organization, terms of reference and timing of the mid-term evaluation will be decided after consultation between the parties to the project document.The Terms of Reference for this Mid-term evaluation will be prepared by the UNDP CO based on guidance from the Regional Coordinating Unit and UNDP-GEF. The management response and the evaluation will be uploaded to UNDP corporate systems, in particular the UNDP Evaluation Office Evaluation Resource Center (ERC).
238. The relevant GEF Focal Area Tracking Tools will also be completed during the mid-term evaluation cycle.

## End of Project:

239. An independent Final Evaluation will take place three months prior to the final Project Steering Committeemeeting and will be undertaken in accordance with UNDP and GEF guidance.The final evaluation will focus on the delivery of the project's results as initially planned (and as corrected after the mid-term evaluation, if any such correction took place). The final evaluation will look at impact and sustainability of results, including the contribution to capacity development and the achievement of global environmental benefits/goals. The Terms of Reference for this evaluation will be prepared by the UNDP CO based on guidance from the Regional Coordinating Unit and UNDP-GEF.
240. The Terminal Evaluation should also provide recommendations for follow-up activities and requires a management response which should be uploaded to PIMS and to the UNDP Evaluation Office Evaluation Resource Center (ERC).
241. The relevant GEF Focal Area Tracking Tools will also be completed during the final evaluation.
242. During the last three months, the project team will prepare the Project Terminal Report. This comprehensive report will summarize the results achieved (objectives, outcomes, outputs), lessons learned, problems met and areas where results may not have been achieved. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the project's results.

## Learning and knowledge sharing:

243. Results from the project will be disseminated within and beyond the project intervention zone through existing information sharing networks and forums.
244. The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to project implementation though lessons learned. The project will identify, analyse, and share lessons learned that might be beneficial in the design and implementation of similar future projects.
245. Finally, there will be a two-way flow of information between this project and other projects of a similar focus.

## Communications and visibility requirements

246. Full compliance is required with UNDP's Branding Guidelines. These can be accessed at http://intra.undp.org/coa/branding.shtml, and specific guidelines on UNDP logo use can be accessed at: http://intra.undp.org/branding/useOfLogo.html. Amongst other things, these guidelines describe when and how the UNDP logo needs to be used, as well as how the logos of donors to UNDP projects needs to be used. For the avoidance of any doubt, when logo use is required, the UNDP logo needs to be used alongside the GEF logo.The GEF logo can be accessed at:http://www.thegef.org/gef/GEF logo.The UNDP logo can be accessed at http://intra.undp.org/coa/branding.shtml.
247. Full compliance is required with the GEF's Communication and Visibility Guidelines (the "GEF Guidelines"). The GEF Guidelines can be accessed at: http://www.thegef.org/gef/sites/ thegef.org/files/ documents/C.40.08 Branding the GEF\%20final 0.pdf. Amongst other things, the GEF Guidelines describe when and how the GEF logo needs to be used in project publications, vehicles, supplies and other project equipment. The GEF Guidelines also describe other GEF promotional requirements regarding press releases, press conferences, press visits, visits by Government officials, productions and other promotional items.

## M\&E workplan and budget

Table 16: Monitoring and Evaluation Work plan and Budget

| 1ypent | Tusionsiliternulus | hulyo <br> Shintus intict <br>  | Tlime rimio |
| :---: | :---: | :---: | :---: |
| Inception Workshop and Report | - PC <br> - UNDP CO, UNDP GEF | Indicative cost: $6,000$ | Within first two months of project start up |
| Measurement of Means of Verification of project results. | - UNDP GEF RTA/PC will oversee the hiring of specific studies and institutions, and delegate responsibilities to relevant team members. | To be finalized in Inception Phase and Workshop. | Start, mid and end of project (during evaluation cycle) and annually when required. |
| Measurement of Means of Verification for Project Progress on output and implementation | - PC | To be determined as part of the Annual Work Plan's preparation. | Annually prior to ARR/PIR and to the definition of amual work plans |
| ARR/PIR | - PC <br> * UNDP CO <br> - UNDP RTA <br> - UNDP EEG | None | Annually |
| Periodic status/ progress reports | - PC | None | Quarterly |
| Mid-term Evaluation | - PC <br> - UNDP CO <br> - UNDP RCU <br> - External Consultants (i.e. evaluation feam) | Indicative cost:40,000 | At the mid-point of project implementation. |
| Final Evaluation | - PC <br> - UNDP CO <br> - UNDP RCU <br> - External Consultants (i.e. evaluation team) | Indicative cost: $45,000$ | At least three months before the end of project implementation |
| Project Terminal Report | - PC <br> - UNDP CO <br> - local consultant | 0 | At least three months before the end of the project |
| Audit | - UNDPCO <br> - Project manager and team | Indicative cost per year: 6,000 | Yearly |
| Visits to field sites | - UNDP CO <br> - UNDP RCU (as <br> appropriate) <br> - Government representatives | For GEF supported projects, paid from IA fees and operational budget | Yearly |
| TOTAL indicative COST <br> Excluding project staff (PC and PAA) time and UNDP staff and travel expenses |  | US\$ 115,000 |  |

${ }^{\text {*Note: }}$ Costs included in this table are part and parcel of the UNDP Total Budget and Work Plan (TBW) in the PRODOC, and not additional to it.

## PART V: Legal Context

248. This document, together with the UNDAP (2011-2015),constitute a Project Document as referred to in the Standard Basic Assistance Agreement.
249. Consistent with the Article III of the Standard Basic Assistance Agreement, the responsibility for the safety and security of the implementing partner and its personnel and property, and of UNDP's property in the implementing partner's custody, rests with the implementing partner.
250. The implementing partner shall:
a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried out; and
b) assumeall risks and liabilities related to the implementing partner's security, and the full implementation of the security plan.
251. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this agreement.
252. The implementing partner agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.

## SECTION II: STRATEGIC RESULTS FRAMEWORK (SRF)



|  | Indicator | $\begin{aligned} & \text { Baseline } \\ & (2012 / 2013) \end{aligned}$ | Target/s (End of Project) | Source of verification | Risks and Assumptions |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Project Objective To expand, financially secure and strengthen the management of Tanzania's Forest Nature Reserve network in response to the threats to biodiversity. | Number and extent (ha) of formally gazetted FNRs | $\begin{gathered} 5 \\ 186,883 \mathrm{ha} \end{gathered}$ | $\begin{gathered} 11 \\ 305,600 \mathrm{ha} \end{gathered}$ | Government Notice of declaration | Assumptions: <br> - The TFS remains the responsible authority for the planning and management of FNRs during the project duration <br> - The TFS Zonal offices provideongoing financial, administrative and technical support to the FNRs <br> - The Government supports the gazetting of new FNRs <br> - The Government continues to support the natural resource use restrictions in FNRs <br> - The enabling policy and strategic planning framework for FNRs and JFM (notably |
|  | Financial sustainability scorecard for FNR network | 21\% | 35\% | Project review of <br> Financial <br> Sustainability <br> Scorecard |  |
|  | Capacity development indicator score for TFS | Systemic: 59\% Institutional: $50 \%$ Individual: 55\% | Systemic: 62\% Institutional: $58 \%$ Individual: 62\% | Project review of <br> Capacity <br> Development <br> Indicator Scorecard |  |
|  | Management Effectiveness Tracking Tool scorecard |  |  | Project review of METT scorecard (every two years) |  |




|  | Indicator | $\begin{gathered} \text { Baseline } \\ (2012 / 2013) \end{gathered}$ | Target/s (End of Project) | Source of verification | Risks and Assumptions |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | (clearing, steps, drainage, signage) |  |  |  | communities <br> - The Government and TFS do not commit adequate resources and funding to significantly improve the management effectiveness of FNRs. |
|  | Number of targeted FNRs with signed MOUs with all affected villages, and an operating joint co-management structure. | 0 | 6 | MOU's <br> FNR quarterly/annual reports Project reports |  |
|  | Value (US\$) of funding raised in support of the development and implementation of communitybased livelihood opportunities for villages with signed MOUs with the six targeted FNRs | <US\$10,000/annum | >US $\$ 100,000 /$ annum | FNR quarterly/annual reports Project reports |  |
|  | Number of FNR and TFS-support staff completing technical, conservation, enforcement, communications and tourism skills development courses and training programmes | N/A | 40 | FNR quarterly/annual reports <br> TFS Annual Report Project reports |  |
|  | Number of FNR working forum meetings/annum | 0 | 4 | FNR quarterly/annual reports Project reports |  |
| Outcome 2 Strengthening the | Outputs: |  |  |  |  |
| financial sustainability of the FNR network | 2.1 The commercial developme <br> 2.2 The destinations, attractions <br> 2.3 Other income-generating ac | ourism and recreationa ties and services in FN in targeted FNRs are | and services in the FNR ectively marketed to tar and tested | mplemented through PPP diences |  |


|  | Indicator | Baseline (2012/2013) | $\begin{gathered} \text { Target/s } \\ \text { (End of Project) } \end{gathered}$ | Source of verification | Risks and Assumptions |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of subsidiary FNR Tourism Development Plans | 0 | 11 | Tourism Development Plans <br> FNR quarterly/annual reports Project reports | Assumptions: <br> - Income from the development and use of FNRs is 'ring-fenced' for re-investment into their maintenance and management <br> - The tourism development |
|  | Number of nature-based tourism and/or recreational concessions/leases awarded and under development in FNRs | 0 | 2 | Concession/ lease agreements TFS Annual Report | be financially viable for private sector investment <br> - The joint venture commercial farming activities are financially sustainableand will not |
|  | Income/annum (US\$) to FNRs from nature-based tourism concessions/leases | US\$0 | >US\$10,000 | TFS Annual Report and Financial Audit | integrity of the FNRs <br> - Local government will facilitate and support improvements to |
|  | Number of individuals from FNR-adjacent villages benefiting directly from tourism concessions/leases (construction and/or operational phases) | 0 | >100 | Project Reports Concessionaire reports FNR quarterly/annual reports | the reserve-access roads and signage <br> - Commercial operators, hotel chains and tour companies will participate in the marketing of FNRs |
|  | Number of visitors/annum to FNRs | $\begin{aligned} & \text { Day: <2000 } \\ & \text { Overnight: }<300 \end{aligned}$ | $\begin{gathered} \text { Day: }>5000 \\ \text { Ovemight: }>500 \end{gathered}$ | FNR quarterly/annual reports <br> TFS Annual Report | Risks: <br> - Local communities living in and around the reserves conflict with TFS over restrictions on their |
|  | Number of, and income (US\$/annum) from, joint venture bee and butterfly farms in FNRs | $\begin{gathered} \text { Number: } 0 \\ \text { Income (US } \$ / \text { annum): } 0 \end{gathered}$ | Number: $>4$ Income (USS/annum): >US $\$ 50,000$ | Farm operator annual and financial reports FNR quarterly/annual reports <br> TFS Annual Report and Financial Audit Project Reports | natural resources in FNRs. This conflict in tum leads to a significant increase in the illegal clearance of, and unsustainable levels of harvesting of natural resources from, FNRs by these communities |


| Indicator | $\begin{gathered} \text { Baseline } \\ (2012 / 2013) \end{gathered}$ | $\begin{gathered} \text { Target/s } \\ \text { (End of Project) } \end{gathered}$ | Source of verification | Risks and Assumptions |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | - The Government and TFS do not commit adequate resources and funding to significantly improve the management effectiveness of FNRs. This may, in turn, limit the interest of the private sector in investing in large-scale tourism concessions in FNRs |
| Financial plan for FNR network | Yes | No | Financial Plan Project reports |  |
| Additional ring-fenced income (US\$/annum) raised from new/additional donor sources for FNR development and management | N/A | >US $\$ 300,000$ | TFS Annual Report and Financial Audit Project Reports |  |


|  | Indicator | $\begin{aligned} & \text { Baseline } \\ & (2212 / 2013) \end{aligned}$ | $\begin{gathered} \text { Target/s } \\ \text { (End of Project) } \end{gathered}$ | Source of verification | Risks and Assumptions |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of subsidiary FNR Tourism Development Plans | 0 | 11 | Tourism Development <br> Plans <br> FNR quarterly/annual reports <br> Project reports | Assumptions: <br> - Income from the development and use of FNRs is 'ring-fenced' for re-investment into their maintenance and management <br> - The tourism development |
|  | Number of nature-based tourism and/or recreational concessions/leases awarded and under development in FNRs | 0 | 2 | Concession/lease agreements TFS Annual Report | tourism development plans will be financially viable for private sector investment <br> - The joint venture commercial farming activities are financially sustainableand will not |
|  | Income/annum (US\$) to FNRs from nature-based tourism concessionsleases | US\$0 | >US\$10,000 | TFS Annual Report and Financial Audit | compromise the biological integrity of the FNRs <br> - Local government will facilitate and support improvements to |
|  | Number of individuals from FNR-adjacent villages benefiting directly from tourism concessions/leases (construction and/or operational phases) | 0 | >100 | Project Reports <br> Concessionaire reports <br> FNR quarterly/annual reports | the reserve-access roads and signage <br> - Commercial operators, hotel chains and tour companies will participate in the marketing of FNRs |
|  | Number of visitors/annum to FNRs | $\begin{gathered} \text { Day: }<2000 \\ \text { Ovemight: }<300 \end{gathered}$ | $\begin{gathered} \text { Day: }>5000 \\ \text { Overnight: }>500 \end{gathered}$ | FNR quarterly/annual reports TFS Annual Report | Risks: <br> - Local communities living in and around the reserves conflict with TFS over restrictions on their |
|  | Number of, and income (US\$/annum) from, joint venture bee and butterfly farms in FNRs | $\begin{gathered} \text { Number: } 0 \\ \text { Income (US } \$ / \text { annum): } 0 \end{gathered}$ | $\begin{gathered} \text { Number: >4 } \\ \text { Income (US\$/annum): } \\ \text { >US } \$ 50,000 \end{gathered}$ | Farm operator annual and financial reports FNR quarterly/annual reports <br> TFS Annual Report and Financial Audit Project Reports | natural resources in FNRs. This conflict in turn leads to a significant increase in the illegal clearance of, and unsustainable levels of harvesting of natural resources from, FNRs by these communities |


| Indicator | Baseline (2012/2013) | $\begin{gathered} \text { Target/s } \\ \text { (End of Project) } \end{gathered}$ | Source of verification | Risks and Assumptions |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | - The Government and TFS do not commit adequate resources and funding to significantly improve the management effectiveness of FNRs. This may, in turn, limit the interest of the private sector in investing in large-scale tourism concessions in FNRs |
| Financial plan for FNR network | Yes | No | Financial Plan Project reports |  |
| Additional ring-fenced income (US\$/annum) raised from new/additional donor sources for FNR development and management | N/A | >US\$300,000 | TFS Annual Report and Financial Audit Project Reports |  |

## SECTION III: TOTAL BUDGET AND WORKPLAN

| Allas Award ID: |  |
| :--- | :--- |
| Atlas Project ID: | 5106 |
| Award Title: | PIMS Enhancing the Forest Nature Reserve network for <br> biodiversity conservation in Tanzania |


| Business Unit: | Tanzania |
| :--- | :--- |
| Project Title: | Enhancing the Forest Nature Reserve network for biodiversity <br> conservation in Tanzania |
| Implementing Partner | Tanzania Forest Service |


| GEF Outcome/ Atlas Activity | Responsible Partyl Implementing Agent | $\begin{aligned} & \hline \text { Fund } \\ & \text { ID } \end{aligned}$ | Donor Name | ATLAS Budget Code | ATLAS Budget Description | Amount YEAR 1 (USD) | Amount YEAR 2 (USD) | Amount YEAR 3 (USD) | $\begin{array}{\|l\|} \hline \text { Amount } \\ \text { YEAR } \\ 4 \text { (USD) } \end{array}$ | Amount YEAR 5 (USD) | TOTAL | $\begin{array}{\|c} \text { Budget } \\ \# \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Component 1: <br> Reforming the institutional framework to strengthen the management effectiveness of national protected areas | NIM | 62000 | $\begin{aligned} & \text { GEF- } \\ & 10003 \end{aligned}$ | 71200 | International Consultants | 21000 | 33000 | 33000 | 12000 | 0 | 99000 | 1 |
|  |  |  |  | 71300 | Local Consultants | 20000 | 40000 | 20000 | 0 | 0 | 80000 | 2 |
|  |  |  |  | 71400 | Contractual Services - Individ. | 60000 | 60000 | 40000 | 30000 | 20000 | 210000 | 3 |
|  |  |  |  | 71600 | Travel | 65000 | 55000 | 45000 | 40000 | 34000 | 239000 | 4 |
|  |  |  |  | 72100 | Contractual Services-Comp. | 190000 | 480000 | 400000 | 70000 | 0 | 1140000 | 5 |
|  |  |  |  | 72200 | Equipment and furniture | 45000 | 160000 | 80000 | 30000 | 0 | 315000 | 6 |
|  |  |  |  | 72800 | Information technology equip. | 0 | 35000 | 0 | 0 | 0 | 35000 | 7 |
|  |  |  |  | 74100 | Professional Services | 30000 | 18000 | 17000 | 15000 | 10000 | 90000 | 8 |
|  |  |  |  | 74200 | Audio-visual \& printing prod. | 18000 | 14000 | 8000 | 6000 | 0 | 46000 | 9 |
|  |  |  |  | 75700 | Training, Workshops \& Conferences | 8000 | 6000 | 6000 | 3000 | 3000 | 26000 | 10 |
|  |  |  |  | Total - Component 1 (GEF) |  | 457000 | 901000 | 649000 | 206000 | 67000 | 2280000 |  |
|  | NIM | 04000 | UNDPTRAC | 71600 | Travel | 24000 | 6000 | 0 | 0 | 0 | 30000 | 11 |
|  |  |  |  | 72200 | Equipment and furniture | 6000 | 24000 | 36000 | 14000 | 0 | 80000 | 12 |
|  |  |  |  | 72300 | Materials and goods | 50000 | 90000 | 75000 | 55000 | 10000 | 280000 | 13 |
|  |  |  |  | 74100 | Professional Services | 15000 | 35000 | 35000 | 25000 | 10000 | 120000 | 14 |
|  |  |  |  | 75700 | Training, Workshops \& Conferences | 15000 | 15000 | 10000 | 5000 | 5000 | 50000 | 15 |
|  |  |  |  | Total- Component 1 (UNDP-TRAC) |  | 110000 | 170000 | 156000 | 99000 | 25000 | 560000 |  |
|  | TOTAL COMPONENT 1 |  |  |  |  | 567000 | 1071000 | 805000 | 305000 | 92000 | 2840000 |  |
| Component 2: | NIM | 62000 | GEF- | 71300 | Local Consultants | 0 | 35000 | 80000 | 19000 | 0 | 134000 | 16 |


| Improving the financial sustainability of the network of national protected areas |  |  | 10003 | 71400 | Contractual Services -Individ. | 0 | 40000 | 45000 | 45000 | 16000 | 146000 | 17 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 71600 | Travel | 30000 | 25000 | 35000 | 35000 | 15000 | 140000 | 18 |
|  |  |  |  | 72100 | Contractual services - Comp. | 210000 | 240000 | 175000 | 165000 | 165000 | 955000 | 19 |
|  |  |  |  | 72300 | Materials and goods | 40000 | 110000 | 40000 | 20000 | 0 | 210000 | 20 |
|  |  |  |  | 75700 | Conference \& events | 0 | 10000 | 15000 | 5000 | 0 | 30000 | 21 |
|  |  |  |  | Total - Component 2 (GEF) |  | 280000 | 460000 | 390000 | 289000 | 196000 | 1615000 |  |
|  | NIM | 04000 | UNDP- <br> TRAC | 71200 | International Consultants | 0 | 0 | 30000 | 0 | 30000 | 60000 | 22 |
|  |  |  |  | 71300 | Local Consultants | 0 | 0 | 12500 | 0 | 12500 | 25000 | 23 |
|  |  |  |  | 71600 | Travel | 0 | 0 | 1500 | 0 | 1500 | 3000 | 24 |
|  |  |  |  | 74100 | Professional Services | 5000 | 18000 | 15000 | 14000 | 5000 | 57000 | 25 |
|  |  |  |  | 74200 | Audio-visual \& printing prod. | 6000 | 18000 | 16000 | 2000 | 0 | 42000 | 26 |
|  |  |  |  | 75700 | Training, Workshops \& Conferences | 8000 | 14000 | 12000 | 4000 | 2000 | 40000 | 27 |
|  |  |  |  | Total - | mponent 2 (UNDP-TRAC) | 19000 | 50000 | 87000 | 20000 | 51000 | 227000 |  |
|  |  |  |  |  | TOTAL COMPONENT 2 | 299000 | 510000 | 477000 | 309000 | 247000 | 1842000 |  |
| Project <br> Management | NIM | 62000 | $\begin{aligned} & \text { GEF- } \\ & 10003 \end{aligned}$ | 71400 | Contractual Services -Individ. | 24000 | 26000 | 28000 | 32000 | 34000 | 144000 | 28 |
|  |  |  |  | 71600 | Travel | 12000 | 10000 | 9000 | 9000 | 6000 | 46000 | 29 |
|  |  |  |  | 72800 | Information technologyequipt. | 15000 | 0 | 0 | 0 | 0 | 15000 | 30 |
|  |  |  |  | Total - Project Management (GEF) |  | 51000 | 36000 | 37000 | 41000 | 40000 | 205000 |  |
|  | NIM | 04000 | UNDP- <br> TRAC | 71400 | Contractual Services-Individ. | 17000 | 18000 | 20000 | 21000 | 20000 | 96000 | 31 |
|  |  |  |  | 71600 | Travel | 8000 | 8000 | 7000 | 6000 | 6000 | 35000 | 32 |
|  |  |  |  | 72200 | Equipment and furniture | 48000 | 4000 | 0 | 0 | 0 | 52000 | 33 |
|  |  |  |  | 72400 | Comms and audio-visual equip. | 6000 | 5000 | 5000 | 5000 | 4000 | 25000 | 34 |
|  |  |  |  | 72500 | Supplies | 1500 | 1000 | 1000 | 1000 | 500 | 5000 | 35 |
|  |  |  |  | Total - Project Mngmt. (UNDP-TRAC) |  | 80500 | 36000 | 33000 | 33000 | 30500 | 213000 |  |
|  | TOTAL PROJECT MANAGEMENT |  |  |  |  | 131500 | 72000 | 70000 | 74000 | 70500 | 418000 |  |
| TOMEL HROXECEI |  |  |  |  |  | 9078510 | 1188838000 | 113583010 | 6888010 | 409) ${ }^{\text {a }}$ (10 | 51110 11 mm |  |

## BUDGET NOTES

| Budge <br> $\mathbf{t} \#$ | Budget notes |
| :---: | :--- |
| 1 | Contractual appointment of an international protected area planning consultancy to provide professional and technical support to the TFS in the drafting of six |


|  | reserve management plans, and requisite subsidiary plans (Output 1.1) |
| :---: | :---: |
| 2 | Contracting the scrvices of an information systems specialist to provide technical support to TFS in establishing an information management system for FNRs (Output 1.4) |
| 3 | Appointment of short-term local contract labour to: (i) clear and maintain brushcut reserve boundaries in five FNRs @ US $\$ 100 / \mathrm{km}$ (Output 1.1); (ii) construct/install boom gates and reserve entry/boundary signage @ US2000/reserve (Output 1.1); and (iii) maintain (clearing, steps, drainage, signage, etc.) the primary footpath system in six FNRs (Output 1.2) |
| 4 | Travel costs of FNR/TFS staff (fuel and/or DSA) associated with: (i) the formal gazetting of the five new FNRs @ US\$1000/reserve(Output 1.1); (ii) the preparation of six management plans for FNRs @ US\$ $4000 /$ reserve (Output 1.1); (iii) physically (re)locating all surveyed reserve boundary markers in five FNRs @ US $\$ 5000$ /reserve (Output 1.1); (iv) enforcement and compliance patrols in six FNRs (Output 1.2); (v) the iterative negotiation of village-based MOUs with village govemments, and provision of support to livelihood development initiatives, in five FNRs @ US $\$ 8000$ reserve (Output 1.3 ); (vi) 40 FNR staff to attend short course training and skills development programmes (Output 1.4); and (vii) FNR staff to attend the annual FNR working forum meetings (Output 1.4) |
| 5 | Contractual appointment of architectural/civil engineering firm/s to project manage the planning and construction of: (i) new offices in four FNRs @ US $\$ 90000 /$ office; (ii) the renovation and expansion of existing offices in two FNRs @ US $\$ 40000 / \mathrm{office}$; (iii) the construction/renovation of sixteen ranger outposts in six FNRs @ US $\$ 40000$ outpost; and (iv) rehabilitatc (i.e. filling, surfacing, grading, drainage, signage, etc.) the primary roads in six FNRs (Output 1.2) |
| 6 | Procurement of: (i) five $4 \times 4$ hard top or pickup vehicles (each equipped with an extra fuel tank, bullbar, winch, tow bar and spotlights) for six FNRs @ US\$ 45000 /vehicle (Output 1.2); and (ii) eighteen $125-250 \mathrm{cc}$ off-road motorcycles for six FNRs @ US $\$ 5000$ per motorcycle (Output 1.2) |
| 7 | Procurement of computer, scanner, A1/A2 printer, router and GIS and database software for the information management system (Output 1.4) |
| 8 | Legal support services and communication and advertising costs associated with: (i) the gazetting of the five new FNRs @ US $\$ 5000 /$ reserve (Output 1.1); and (ii) the drafting of village-based MOUs and collective co-management structures for six FNRs (Output 1.3) |
| 9 | Costs of audio-visual and printed infornation and communication materials for communities surrounding the six FNRs (Output 1.3) |
| 10 | Meeting costs (vente, meals, drinks, ctc.) associated with: (i) stakeholder consultation processes during the preparation of the six FNR management plans @ US $\$ 1000 /$ reserve (Output 1.1); and (ii) the annual FNR working forum meetings (Output 1.4) |
| 11 | Travel costs associated with the implementation of a communications and awareness-raising program in villages adjacent to five FNRs and informational road shows presented to local government administrations @ US $\$ 6000 / \mathrm{reserve}$ (Output 1.3) |
| 12 | Procurement of basic fumishing and equipnent for ranger outposts and administrative offices, including inter alia desks, tables, chairs, communications infrastructure and storage space @US $\$ 5000$ per office/outpost (Output 1.2) |
| 13 | (i) Material cosls (i.e. stone, cement, concrete beacons) of installing, replacing or repairing reserve boundary markers in five FNRs @ US $\$ 2000 /$ reserve (Output 1.1); (ii) Material costs (e.g. slashers, axes, chainsaws, brushcutters) of maintaining the brushcut reserve boundaries in five FNRs @ US $\$ 2000 /$ reserve (Output 1.1); (iii) Material costs of entry points and entry/boundary signage (signs, poles, concrete, entry booms, etc.) in six FNRs (Output 1.1); (iv) Procurement of uniforms (bools, overalls, trousers, shits, hats) and other basic safety equipment (communications, torch, backpack, binoculars, water bottles, first aid supplies) for 60 ranger staff in six FNRs @ US $\$ 1000$ per ranger (Output 1.2); (y) arterial costs of road and footpath upgrade and maintenance (gravel, Jrains, gabions, concrete, paving, tanolith logs, etc.) in six FNRs (Output 1.2); and (vi) Material costs of road and footpath signage (signs, poles, concretc) in six FNRs (Output 1.2) |


| 14 | Implementation of professional and technical stort-course skills development and training programmes for 40 pre-selected staff (@ 6 courses of US\$500/course per individual) from FNRs and other sections of TFS (Output 1.4) |
| :---: | :---: |
| 15 | Meeting costs (venue, meals, drinks, etc.) associated with information-sharing, conumunications and negotiation processes in villages adjacent to six FNRs @ US $\$ 10000 /$ reserve (Output 1.3) |
| 16 | (i) Secondment costs of TFS staff ( $2 \times 48$ weeks @ US $\$ 400$ week) to maintain a 1 -stop shop in TFS to guide and assist prospective investors through the phase 1 concessioning/lease process (Output 2.1); and (ii) Contracting the services of a professional fund-raiser ( 160 weeks @US $\$ 600 / \mathrm{wk}$ ) to develop and implement fund-raising initiatives (Output 2.3) |
| 17 | Appointment of local conttact labour to provide support to the operations of the butterfly and bee farm joint ventures in FNRs (Output 2.3) |
| 18 | Travel costs (fuel and DSA) of FNRTFFS staff associated with: (i) the tourism planning and concessioning processes (Output 2.1); (ii) the tourism planning and hosting of tour operators/agencies (Output 2.2); and (iii) the planning and management of the commercial butterfly and bee farming joint ventures (Output 2.3) |
| 19 | Contractual appointment of: (i) an international company or corporation to support the TFS in the implementation of tourism planning and tourism concessioning/leasing processes (Output 2.1); (ii) civil engineering firnvs to rehabilitate (i.e. filling, surfacing, grading, drainage, signage, etc.) targeted access roads to FNRs with a tourism concession (Output 2.1); (iii) a marketing and communications company to design and implement a branding and narketing strategy, design and print marketing material (brochures, fact sheets, pamphlets, etc.) and design and host a website for FNRs (Output 2.2); (iv) a financial planning firm to prepare a financial management plan for FNRs, prepare business plans for commercial ventures and assess the feasibility of water charges for catchment forest reserves (Output 2.3); and (v) NGO/NPOs or private operator to project-manage the implementation of the business plans for the butterfly and bee farming joint ventures (Output 2.3) |
| 20 | (i) Material costs (including installation costs) of 30 directional signs to the FNRs @ US $\$ 1000 /$ sign (Output 2.2); and (ii) Procurement of butterfly and bee farming materials (bee - hives and stands; protective clothing; honey extractors; staindess steel storage tanks; buckets; honey filters; etc. / butterfly - composters; irigation system; shade net cages; buckets; collection traps/nets; shipping boxes; etc.) (Output 2.3) |
| 21 | Meeting costs (venue, meals, drinks, etc.) associated with: hosting prospective investor meetings and tourism stakeholder consultation meetings (Output 2.1); |
| 22 | Contracting the services of: (i) an international mid-term evaluation consultant ( 10 weeks @US $3000 / \mathrm{wk}$ ) (M\&E); and (ii) an international final evaluation consultant ( 10 wecks @US $3000 / \mathrm{wk}$ ) (M\&E) |
| 23 | Contracting the services of: (i) a local mid-term evaluation consultant ( 10 wecks 9 US $1000 / \mathrm{wk}$ ) (M\&E); and (ii) a local final evaluation consultant (15 weeks @US 1000/wk) (M\&E) |
| 24 | Local travel costs and DSA of intemational consultants (M\&E) |
| 25 | (i) Implementation of a nature-based tourism development and training programmes for 6 pre-selected staff ( $@$ US $\$ 5000 /$ staff member) from FNRs and other sections of TFS (Output 2.1); (ii) Translation and meeting costs of inception meeting (M\&E); and (iii) Annual auditing of project @US\$6000/audit (M\&E) |
| 26 | Production costs of preparing tourism plans, concessions manual, investnrent prospectus and tourismi information packages (Output 2.1) |
| 27 | Costs (transport, meals, drinks, ovemight accommodation) of hosting day and overnight visits to FNRs for targeted tour operators/agencicshotel chains @ 20 site visits © US $\$ 2000 /$ visit (Output 2.2) |
| 28 | Contractual appointment of a Project Manager (@ US $\$ 600 / \mathrm{wk}$ for 240 wks ) |
| 29 | Pro rata travel costs (fuel and DSA) of project management staff |
| 30 | Laptops, software licenses, portable hard drive, router, printers, 3G cards, data projector, ISP contract for |


|  | reserve management plans, and requisite subsidiary plans (Output 1.1) |
| :---: | :---: |
| 2 | Contracting the services of an information systems specialist to provide technical support to TFS in establishing an information management system for FNRs (Output 1.4) |
| 3 | Appointment of short-term local contract labour to: (i) clear and maintain brushcut reserve boundaries in five FNRs @ US $\$ 100 / \mathrm{km}$ (Output 1.1); (ii) construc $/$ /install boom gates and reserve entry/boundary signage @ US2000/reserve (Output 1.1); and (iii) maintain (clearing, steps, drainage, signage, etc.) the primary footpath system in six FNRs (Output 1.2) |
| 4 | Travel costs of FNR/TFS staff (fuel and/or DSA) associated with: (i) the formal gazetting of the five new FNRs @ US $\$ 1000 /$ reserve(Output 1.1); (ii) the <br>  FNRs @ US $\$ 000 /$ reserve (Output 1.1); (iv) enforcentent and conpliance patrols in six FNRs (Output 1.2); (v) the iterative negotiation of village-based MOUs with village govemntents, and provision of support to livelihood development initiatives, in five FNRs @ US $\$ 8000 /$ reserve (Output 1.3); (vi) 40 FNR staff to attend short course training and skills development programmes (Output 1.4); and (vii) FNR staff to attend the annual FNR working forum meetings (Output 1.4) |
| 5 | Contractual appointment of architectural/civil engineering firm/s to project manage the planning and construction of: (i) new offices in four FNRs @ US $\$ 90000 /$ ffice; (ii) the renovation and expansion of existing offices in two FNRs @ US $\$ 40000 /$ officc; (iii) the constructionfrenovation of sixtcen ranger outposts in six FNRs @ US $\$ 40000 /$ outpost; and (iv) rehabilitate (i.e. filling, surfacing, grading, drainage, signage, etc.) the primary roads in six FNRs (Output 1.2) |
| 6 | Procurement of: (i) five $4 \times 4$ hard top or pickup vehicles (each equipped with an extra fuel tank, bulbar, winch, tow bar and spotlights) for six FNRs @ US\$ $45000 /$ vehicle (Output 1.2); and (ii) eighteen $125-250 \mathrm{cc}$ off-road motorcycles for six FNRs @ US $\$ 5000$ per motorcycle (Output 1.2) |
| 7 | Procurement of computer, scanner, A1/A2 printer, router and GIS and database software for the information management system (Output 1.4) |
| 8 | Legal support services and communication and advertising costs associated with: (i) the gazeting of the five new FNRs @ US $55000 / \mathrm{reserve}$ (Output 1.1); and (ii) the drafting of village-based MOUs and collective co-management structures for six FNRs (Output 1.3) |
| 9 | Costs of audio-visual and printed information and communication materials for communities surrounding the six FNRs (Output 1.3) |
| 10 | Meeting costs (venue, meals, drinks, etc.) associated with: (i) stakcholder consultation processes during the preparation of the six FNR management plans @ US $\$ 1000 /$ reserve (Output 1.1); and (ii) the annual FNR working formm meetings (Output 1.4) |
| 11 | Travel costs associated with the implementation of a communications and avareness-raising program in villages adjacent to five FNRs and informational road shows presented to local government administrations @ US $\$ 6000 /$ reserve (Output 1.3) |
| 12 | Procurement of basic furnishing and equipment for ranger outposts and administrative offices, including inter alia desks, tables, chairs, communications infrastucture and storage space @US $\$ 5000$ per office/outpost (Output 1.2) |
| 13 | (i) Material costs (i.e. stone, cement, concrete beacons) of installing, replacing or repairing reserve boundary markers in five FNRs @ US $\$ 2000 /$ reserve (Output 1.1); (ii) Material costs (e.g. slashers, axes, chainsaws, brushcutters) of maintaining the brushcut reserve boundaries in five FNRs @ US $\$ 2000 / \mathrm{reserve}$ (Output 1.1); (iii) Material costs of entry points and entry/boundary signage (signs, poles, concrete, entry booms, etc.) in six FNRs (Output 1.1); (iv) Procurement of uniforms (boots, overalls, trousers, shirs, hats) and other basic safety equipment (communications, torch, backpack, binoculars, water botles, first aid supplics) for 60 ranger staff in six FNRs @ US $\$ 1000$ per ranger (Output 1.2); (v) arterial costs of road and footpath upgrade and maintenance (gravel, drains, gabions, concrete, paying, tanolith logs, etc.) in six FNRs (Output 1.2); and (vi) Material costs of road and footpath signage (signs, poles, concrete) in six FNRs (Output 1.2) |


| 14 | Implementation of professional and technical short-course skills development and training programntes for 40 pre-selected staff (@ 6 courses of US $\$ 500$ course per individual) from FNRs and other sections of TFS (Output 1.4) |
| :---: | :---: |
| 15 | Meeting costs (venue, neals, drinks, etc.) associated with information-sharing, communications and negotiation processes in villages adjacent to six FNRs @ US $\$ 10000 /$ reserve (Output 1.3) |
| 16 | (i) Secondment costs of TFS staff ( $2 \times 48$ weeks @ US $\$ 400 /$ week) to maintain a 1 -stop shop in TFS to guide and assist prospective investors through the phase 1 concessioning/lease process (Output 2.1); and (ii) Contracting the services of a professional fund-raiser ( 160 weeks @US $\$ 600$ /wf) to develop and implement fund-raising initiatives (Output 2.3) |
| 17 | Appointment of local contract labour to provide support to the operations of the butterfly and bee farm joint ventures in FNRs (Output 2.3) |
| 18 | Travel costs (fuel and DSA) of FNR/TFS staff associated with: (i) the tourism planning and concessioning processes (Output 2.1); (ii) the tourism planning and hosting of tour operators/agencies (Output 2.2); and (iii) the planning and management of the commercial butterfly and bee farming joint ventures (Output 2.3) |
| 19 | Contractual appointment of: (i) an international company or corporation to support the TFS in the implementation of tourism planning and tourism concessioning/leasing processes (Output 2.1); (ii) civil enginecring firm/s to rehabilitate (i.e. filling, surfacing, grading, drainage, signage, etc.) targeted access roads to FNRs with a tourism concession (Output 2.1); (iii) a marketing and communications conupany to design and implement a branding and marketing strategy, design and print marketing material (brochures, fact sheets, pamphlets, etc.) and design and host a websitc for FNRs (Output 2.2); (iv) a financial planning firm to prepare a financial management plan for INRs, prepare business plans for commercial ventures and assess the feasibility of water charges for catchment forest reserves (Output 2.3); and (v) NGO/NPOs or private operator to project-manage the implementation of the business plans for the butterlly and bee farming joint ventures (Output 2.3) |
| 20 | (i) Material costs (including installation costs) of 30 directional signs to the FNRs @ US $\$ 1000 /$ sign (Output 2.2); and (ii) Procurement of butterlly and bee farning materials (bee - hives and stands; protective clothing; honey extractors; stainless steel storage tanks; buckets; honey filters; etc. / butterfly - composters; irrigation system; shade net cages; buckets; collection traps/nets; shipping boxes; etc.) (Output 2.3) |
| 21 | Meeting costs (venue, meals, drinks, etc.) associated with: hosting prospective investor meetings and tourism stakeholder consulation meetings (Output 2.1); |
| 22 | Contracting the services of: (i) an international mid-term evaluation consultant ( 10 weeks @US3000/wk) (M\&E); and (ii) an international final evaluation consullant ( 10 weeks @US3000/wk) (M\&E) |
| 23 | Contracting the services of: (i) a local mid-term evaluation consultant ( 10 weeks @US $1000 / \mathrm{wk}$ ) (M\&E); and (ii) a local final evaluation consultant ( 15 weeks @US $1000 / \mathrm{wk}$ ) (M\&E) |
| 24 | Local travel costs and DSA of intemational consultants (M\&E) |
| 25 | (i) Implementation of a nature-based tourism development and training programmes for 6 pre-selected staff (@US $\$ 5000 /$ staff member) fron INRs and other sections of TFS (Output 2.1); (ii) Translation and meeting costs of inception neeting (M\&E); and (iii) Annual auditing of project @US\$6000/audit (M\&E) |
| 26 | Production costs of preparing tourism plans, concessions manual, investment prospectus and tourism information packages (Output 2.1) |
| 27 | Costs (transport, meals, drinks, ovemight accommodation) of hosting day and overnight visits to FNRs for targeted tour operators/agenciesfhotel chains @ 20 site visits @ US $\$ 2000 /$ visit (Output 2.2) |
| 28 | Contractual appointment of a Project Manager (@ US $\$ 600 \% \mathrm{wk}$ for 240 wks ) |
| 29 | Pro rata travel costs (fuel and DSA) of project management staff |
| 30 | L3p |


| 31 | Contractual appointment of a Project Administrative Assistant (US $\$ 400 / \mathrm{wk}$ for 240 weeks) |
| :--- | :--- |
| 32 | Pro rata travel costs (fuel and DSA) of project management staff |
| 33 | Procurement of dedicated vehicle for the project management team (pickup or hard top) and office chairs, desks, tables, storage cupboards, etc. |
| 34 | Cell phone costs of project management staff |
| 35 | Procurement of office supplies |


| SUMMARY OF FUNDS*: | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Funder - GEF | 788000 | 1397000 | 1076000 | 536000 | 303000 | 4100000 |
| Funder - UNDP-TRAC | 209500 | 256000 | 276000 | 152000 | 106500 | 1000000 |
| TOTAL | 997500 | 1653000 | 1352000 | 688000 | 409500 | 5100000 |

PROJECT MANAGEMENT COSTS:

| GEF | 205000 | \% of funder- <br> committed amount |
| :--- | ---: | :---: |
| UNDP-DAS | 913000 | $\mathbf{5 . 0 \%}$ |

* Refer to Section IV. Part IV for the co-financing break-down. The above refers only to funds managed under the Full-Project's Atlas Award.


## SECTION IV: ADDITIONAL INFORMATION

## PART I: Terms of Reference for project staff

## PROJECT COORDINATOR

## Background

The Project Coordinatorwill be locally recruited, based on an open competitive process. He/She will be responsible for the overall management of the project, including the mobilization of all project inputs, supervision over project staff, consultants and sub-contractors. The Project Coordinatorwill report to the PD for all of the project's substantive and administrative issues. From the strategic point of view of the project, the Project Coordinatorwill report on a periodic basis to the Project Steering Committee(PSC). Generally he/she will be responsible for meeting government obligations under the project, under the national implementation modality (NIM). The incumbent will perform a liaison role with the Government, UNDP, implementing partners, NGOs and other stakeholders, and maintain close collaboration with any donor agencies supporting project activities.

## Duties and Responsibilities

- Supervise and coordinate the production of project outputs, as per the project document;
- Mobilize all project inputs in accordance with procedures for nationally implemented projects;
- Supervise and coordinate the work of all project staff, consultants and sub-contractors;
- Coordinate the recruitment and selection of project personnel;
- Prepare and revise project work and financial plans;
- Liaise with UNDP, relevant government agencies, and all project partners, including donor organizations and NGOs for effective coordination of all project activities;
- Facilitate administrative backstopping to subcontractors and training activities supported by the project;
- Oversee and ensure timely submission of the Inception Report, Combined Project Implementation Review/Annual Project Report (PIR/APR), Technical reports, quarterly financial reports, and other reports as may be required by UNDP, GEF, TFSand other oversight agencies;
- Disseminate project reports and respond to queries from concerned stakeholders;
- Report progress of project to the PSC, and ensure the fulfilment of PSC directives;
- Oversee the exchange and sharing of experiences and lessons learned with relevant community based integrated conservation and development projects nationally and internationally;
- Ensure the timely and effective implementation of all components of the project;
- Assist relevant government agencies and project partners - including donor organizations and NGOs with developinent of essential skills through training workshops and on the job training thereby upgrading their institutional capabilities;
- Coordinate and assists national Pls with the initiation and implementation of any field studies and monitoring components of the project
- Carry regular, announced and unannounced inspections of all sites and the activities of any project site management units.


## Qualifications and experience

- A post-graduate university degree in Business and/or Environmental Management;
- At least 10 years of relevant experience in business and/or natural resource planning and management (preferably in the context of protected area financial planning and management);
- At least 5 years of project management experience;
- Work experience in international projects or within international organisations is highly desirable;
- Working experience with the project national stakeholder institutions and agencies is desired;
- Ability to effectively coordinate a large, multi-stakeholder project;
- Ability to administer budgets, train and work effectively with counterpart staff at all levels and with all groups involved in the project;
- Strong writing, presentation and reporting skills;
- Strong computer skilis;
- Excellent written communication skills; and
- A good working knowledge of Kiswahili is a requirement.


## PROJECT ADMINISTRATIVE ASSISTANT

## Background

The Project Administrative Assistant (PAA) will be locally recruited based on an open competitive process. $\mathrm{He} /$ She will be responsiblefor the overall administration of the project. The Project Assistant will report to the Project Coordinator. Generally, the Project Administrative Assistant will be responsible for supporting the Project Coordinator in meeting government obligations under the project, under the national implementation modality (NIM).

## Duties and Responsibilities

- Collect, register and maintain all information on project activities;
- Contribute to the preparation and implementation of progress reports;
- Monitor project activities, budgets and financial expenditures;
- Advise all project counterparts on applicable adninistrative procedures and ensures their proper implementation;
- Maintain project correspondence and communication;
- Support the preparations of project work-plans and operational and financial planning processes;
- Assist in procurement and recruitment processes;
- Assist in the preparation of payments requests for operational expenses, salaries, insurance, etc. against project budgets and work plans;
- Follow-up on timely disbursements by UNDP CO;
- Receive, screen and distribute correspondence and attach necessary background information;
- Prepare routine correspondence and memoranda for Project Coordinators signature;
- Assist in logistical organization of meetings, training and workshops;
- Prepare agendas and arrange field visits, appointments and meetings both internal and external related to the project activities and write minutes from the meetings;
- Maintain a project filing system;
- Maintain records over project equipment inventory; and
- Perform other duties as required.


## Qualifications and experience

- A post-school qualification (diploma, or equivalent);
- At least 5 years of relevant administrative and/or bookkeeping experience;
- Work experience in international projects or within international organisations is highly desirable;
- Demonstrable ability to administer project budgets, and track financial expenditure;
- Demonstrable ability to maintain effective communications with different stakeholders, and arrange stakeholder meetings and/or workshops;
- Excellent computer skills, in particular mastery of all applications of the MS Office package;
- Excellent written communication skills; and
- A good working knowledge of Kiswahili is a requirement.


## OTHER CONSULTANTS/ CONTRACTED INDIVIDUALS

| Rosition Tiles | haticative STpersoin! week | Istinuled person heeks. | Tastsit he petformed |
| :---: | :---: | :---: | :---: |
| Local |  |  |  |
| Information management system specialist | 1000 | 80 | Output 1.4 <br> Work with designated TFS staff to: identify the scope of information needs; develop data and information collection methodologies; collate existing and new information; converting information into electronic datasets; design and establish an electronic information management system; identify hardware, software and networking requirements; develop data access and maintenance protocols; and train at least 2 staff inembers from TFS in GIS, geospatial database administration, non-spatial data management and applications |


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| :---: | :---: | :---: | :---: |
|  |  |  | development. |
| PPP administrative support - seconded TFS staff (2) | 400 | 48 | Output 2.1 <br> Maintain a 1 -stop shop in TFS to guide and assist prospective investors through the phase 1 (Output 2.1). This may include: distribution of investor prospectus to prospective investors; liaison with prospective investors; organising site visits for prospective investors; responding to requests for information; liaison with FNR conservators; inviting EOIs for tourism development concessioning opportunities; and maintaining records of the concessioning process. |
| Professional fundraiser | 1000 | 96 | Output 2.3 <br> Identify projects for external funding; target potential funders for these projects; prepare detailed funding proposals; liaise with different development partners and other prospective funders; and build working partnerships with development partners and other prospective funders |
| Evaluation experts for mid-term (1) and final (1) evaluation | 1000 | 25 | M\&E <br> The standard UNDP/GEF project evaluation TOR will be used. This will include: supporting the mid-term and the final evaluations; assisting the international evaluation consultant in order to assess the project progress, achievement of results and impacts; supporting the drafting of the evaluation report and discussing it with the project team, government and UNDP; and as necessary, participating in discussions to extract lessons for UNDP and GEF. |
| International |  |  |  |
| Protected area planning specialist | 3000 | 33 | Output 1.1 <br> Provide professional and technical 'backstopping' support to TFS in the iterative drafting of new, and the updating of existing RMPs (and linked subsidiary plans) in six FNRs (Output 1.1) |
| Evaluation experts for mid-term (1) and final (1) evaluation | 3000 | 14 | M\&E <br> The standard UNDP/GEF project evaluation TOR will be used. This will include: leading the mid-term and the final evaluations; working with the local evaluation consultant in order to assess the project progress, achievement of results and impacts; developing the draft evaluation report and discussing it with the project team, government and UNDP; and as necessary, participating in discussions to extract lessons for UNDP and GEF. |

Complete and more thorough ToRsfor these positions will be developed by the Project Coordinator, once recruited.

## PART II: Project maps

Contextual maps of the targeted Forest Nature Reserves (proposed - Chome, Magamba, Mkingu, Uzungwa Scarp and Minziro; existing - Rungwe)




## PART III: Stakeholder Involvement Plan and Coordination with other Related Initiatives

## 1. Stakeholder identification

During the project preparation stage, a stakeholder analysis was undertaken in order to identify key stakeholders, assess their interests in the project and defines their roles and responsibilities in project implementation. The table below describes the major categories of stakeholders identified, and the level of involvement envisaged in the project.

Table 17: Stakeholder Involvement Plan

| Organisulon | Mundate of The organ sation (paricularty it respeof of TNRS) | Anticipated roles and respons bilites th the profent |
| :---: | :---: | :---: |
| Ministries, Departments and Agencies (MDAs) |  |  |
| Vice President's Office (VPO) <br> Division of Environment (DoE) | The DoE is responsible for the coordination of all national and international matters related to environmental protection and management. It is also responsible for national reporting to the relevant international conventions. | The DoE will ensure the alignment and integration of the project activities with national environmental strategies and plans. |
| Ministry of Natural Resources and Tourism (MNRT) <br> Forest and Beekeping Division (FBD) | The MNRT has responsiblity for overseeing the management of all natural, cultural and tourism resources in the country. <br> The FBD is directly responsible for the development of forest policy, laws and regulations and supervising their implementation in the forestry sectors | The MNRT will, through the FBD, facilitate the formal proclamation of the targeted FNRs. It will also develop the enabling policies and regulations in support of the effective plamning and management of FNRs. |
| Tanzania Forest Service (TFS) | TFS is is an executive agency mandated with the management of national forest reserves (natural and plantations), bee reserves and forest and bee resources on general lands | The TFS will have overall responsibility for implementation of the project. It will coordinate the implementation of all project activities, and may be responsible for the direct implementation of a number of these activities. It will take the lead role in ensuring ongoing communications with all government agencies and other partners in respect of project implementation. |
| Tanzania Tourist Board (TTB) | TTB is a government organisation responsible for the promotion and development of the tourism industry. | The TTB will assist the project in the marketing and promotion of the tourism products and services in FNRs. |
| National Environment Management Council (NEMC) | The NEMC is responsible for the enforcement of, and ensuring compliance with, the national environmental quality standards. | The NEMC will assist in ensuring that any planned development activity implemented by the project will conform to all national environmental quality standards. |
| Ministry of Energy and Minerals (MEM) | The MEM is responsible for facilitating development of the energy and mineral sectors | The MEM will support the project by assisting in the regulation, monitoring and |


| orgailisifinn | Mandate of the organsonion (purionlarty in respeet of (IMVRs) | Anficipated role and vesponsibilites in the projest |
| :---: | :---: | :---: |
|  | in Tanzania through legislation, policies, strategies and plans for sustainable use. | enforcement of illegal woodfuel harvesting and mining activities in, or impacting on, FNRs. |
| Ministry of Finance and Econonic Affairs (MFEA) | The MFEA is the central executive authority responsible for national financial policy and the management of state finances. <br> The MFEA prepares, administers and monitors the state budget. | The MFEA will be responsible for ensuring the ongoing allocation of funds in the state budget for TFS (and thus FNRs). <br> The MFEA will approve any state budget funds to be allocated as co-financing for the project. |
| Prime Minister's Office- Regional Adminsistration and Local Government (PMORALG) <br> Regional authorities (Regional Administrative Secretariats, RAS) | The PMORALG is responsible for improving the coordination between MDAs, Regional Administrations and Local Government Authorities. They are also responsible for monitoring and improving the institutional capacity and management systems of local government to deliver better quality services. <br> The regional authorities provide technical advice and support, and exercise supervision to, the District Councils. | The PMORALG will facilitate improved linkages between, and alignment with, the project activities and relevant local government initiatives and programmes. PMORALG may also fund, through the Regional Authorities, complementary community development projects around FNRs. |
| Local Government Authorities (LGAs) |  |  |
| District Councils <br> Ward Development Council (WDC) | District Councils are responsible for delivering a range of social, economic and ecological services within their territories of jurisdiction. <br> The WDC is responsible for developing general development plans for the ward. Further, the WDC must manage disasters and environmental related activities within its ward. | WDCs may provide arbitration and conflict resolution services, where conflicts may arise between communities and FNRs. District/ Ward community development staff working in the region of FNRs will support the implementation of project activities. |
| Village Authorities | The Village Councils are responsible for planning and coordinating development activities; rendering assistance and advice to the villagers engaged in agriculture, forestry, horticultural, industrial or any other activity; and for encouraging village residents to undertake and participate in communal enterprises. | Village Councils will provide a democratic institutional vehicle for the project to secure the support, involvement and beneficiation of local communities in project-related activities. They will represent affected communities in the negotiation and conclusion of JFA's between TFS and local communities. |
| Village Assembly (Village Council) | Any proposed by-laws must be adopted by the village assembly before being submitted to the District Council for approval. |  |

## PART III: Stakeholder Involvement Plan and Coordination with other Related Initiatives

## 1. Stakeholder identification

During the project preparation stage, a stakeholder analysis was undertaken in order to identify key stakeholders, assess their interests in the project and defines their roles and responsibilities in project implementation. The table below describes the major categories of stakeholders identified, and the level of involvement envisaged in the project.

Table 17: Stakeholder Involvement Plan

| Ongansifion | Mandale of the onganisafon (pinthulanty in resperiaf (ANRS | Aitiopated roles mat responsibilites in the proient |
| :---: | :---: | :---: |
| Ministries, Departments and Agencies (MDAs) |  |  |
| Vice President's Office (VPO) <br> Division of Enviromnent (DoE) | The DoE is responsible for the coordination of all national and international matters related to environmental protection and management. It is also responsible for national reporting to the relevant international conventions. | The DoE will ensure the alignment and integration of the project activities with national environmental strategies and plans. |
| Ministry of Natural Resources and Tourism (MNRT) <br> Forest and Beekeping Division (FBD) | The MNRT has responsiblity for overseeing the management of all natural, cultural and tourism resources in the country. <br> The FBD is directly responsible for the development of forest policy, laws and regulations and supervising their implementation in the forestry sectors | The MNRT will, through the FBD, facilitate the formal proclamation of the targeted FNRs. It will also develop the enabling policies and regulations in support of the effective planning and management of FNRs. |
| Tanzania Forest Service (TFS) | TFS is is an execulive agency mandated with the management of national forest reserves (natural and plantations), bee reserves and forest and bee resources on general lands | The TFS will have overall responsibility for implementation of the project. It will coordinate the implementation of all project activities, and may be responsible for the direct implementation of a number of these activities. It will take the lead role in ensuring ongoing communications with all government agencies and other partners in respect of project implementation. |
| Tanzania Tourist Board (TTB) | TTB is a govermment organisation responsible for the promotion and development of the tourism industry. | The TTB will assist the project in the marketing and promotion of the tourism products and services in FNRs. |
| National Environment Management Council (NEMC) | The NEMC is responsible for the enforcement of, and ensuring compliance with, the national environmental quality standards. | The NEMC will assist in ensuring that any planned development activity implemented by the project will conform to all national environmental quality standards. |
| Ministry of Energy and Minerals (MEM) | The MEM is responsible for facilitating development of the energy and mineral sectors | The MEM will support the project by assisting in the regulation, monitoring and |


| Organlilitn | Mandale of he orginisufion (parionidity in respect of MNRS) | Ahtionpared roles and responsibilites in the project |
| :---: | :---: | :---: |
|  | in Tanzania through legislation, policies, strategies and plans for sustainable use. | enforcement of illegal woodfuel harvesting and mining activities in, or impacting on, FNRs. |
| Ministry of Finance and Economic Affairs (MFEA) | The MFEA is the central executive authority responsible for national financial policy and the management of state finances. <br> The MFEA prepares, administers and monitors the state budget. | The MFEA will be responsible for ensuring the ongoing allocation of funds in the state budget for TFS (and thus FNRs). <br> The MFEA will approve any state budget funds to be allocated as co-financing for the project. |
| Prime Minister's Office- Regional Adminsistration and Local Governuent (PMORALG) <br> Regional authorities (Regional Administrative Secretariats, RAS) | The PMORALG is responsible for improving the coordination between MDAs, Regional Administrations and Local Government Authorities. They are also responsible for monitoring and improving the institutional capacity and management systems of local government to deliver better quality services. <br> The regional authorities provide technical advice and support, and exercise supervision to, the District Councils. | The PMORALG will facilitate improved linkages between, and alignment with, the project activities and relevant local government initiatives and programmes. PMORALG may also fund, through the Regional Authorities, complementary community development projects around FNRs. |
| Local Government Authorities (LGAs) |  |  |
| District Councils <br> Ward Development Council (WDC) | District Councils are responsible for delivering a range of social, economic and ecological services within their territories of jurisdiction. <br> The WDC is responsible for developing general development plans for the ward. Further, the WDC must manage disasters and environmental related activities within its ward. | WDCs may provide arbitration and conflict resolution services, where conflicts may arise between communities and FNRs. District/ Ward community development staff working in the region of FNRs will support the implementation of project activities. |
| Village Authorities | The Village Councils are responsibie for planning and coordinating development activities; rendering assistance and advice to the villagers engaged in agriculture, forestry, horticultural, industrial or any other activity; and for encouraging village residents to undertake and participate in communal enterprises. | Village Councils will provide a democratic institutional vehicle for the project to secure the support, involvement and beneficiation of local communities in project-related activities. They will represent affected communities in the negotiation and conclusion of JFA's between TFS and local communities. |
| Village Assembly (Village Council) | Any proposed by-laws must be adopted by the village assembly before being submitted to the District Council for approval. |  |


| Organsotion | Mandate of the ofganisntion (particilarly fesper iof THRY) | proted |
| :---: | :---: | :---: |
| Village Natural Resource Committees (VNRC) | The VNRC are responsible for overseeing the protection, conservation and lawful utilization of forest resources | The VNRC will actively support the in situ implementation of project activities, notably in the monitoring and enforcement of reserve regulations. They will assist in the development and adoption of any regulations and by-laws necessary for the protection of FNRs. |
| Development partners and conservation funds |  |  |
| Multilateral organizations(e,g, UNDP, EU, GIZ, World Bank) <br> Development Partners Group (DPG) | Multilateral organisations will play a critical ro assistance (through the MNRT, TFS, TFF, PM development and operationalization of FNRs. <br> The DPG will provide the institutional framew aligning project activities with other compleme programmes across Tanzania. | in providing technical, financial and material RALG and NGOs) in support of the planning, <br> rk (through the JAST) for coordinating and tary donor-funded initiatives, projects and |
| Eastern Arc Mountains Endowment Fund (EAMCEF) | The EAMCEF will provide targeted funding surrounding communities, within the Easter | nical and naterial support to the FNRs, and region in support of project activities. |
| Non-Government Organisations (NGOs) and Community Based Organisations (CBO's) |  |  |
| NGOs (e.g. TFCG, WWF, WSCT, CARE, CI, AVF, CEPF, IUCN,MJUMITA TNRF) <br> CBOs (e.g. women/ youth groups, farmers/hunters associations) | NGOs and CBOs will support project activities through the ongoing implementation of complementary training, awareness-raising and education programmes in the villages abutting the FNRs. <br> NGOs and CBOs may also be contracted or concessioned, on a competitive bid basis, to implement specific community-development, tourism development or conservation management project activities. <br> The project may also enter into partnership agreements with existing NGO- or CBO-funded initiatives in, or linked to, the conservation management of FNRs. |  |
| Local communities |  |  |
| Local people living around the FNRs are one of the principal stakeholders in the project. Local people will be directly involved in, and benefit from, project activities in a number of ways. These include inter alia: (i) direct employment in conservation and tourism activities within the FNRs; (ii) participation in community-state-private sector nature-based tourism enterprises; (iii) training for, and involvement in, alternative livelihood and energy-use projects in villages; (iv) establishment and administration of community-based tourism/recreation enterprise; (v) controlled/subsidised access to sustainable natural resource use in fiNRs; and (vi) co-management of FNRs. |  |  |
| Academic institutions and professional associations |  |  |
| Academic institutions (e.g. Sokoine university, Institute of Resource Assessment, TAFORI, IRA, Olmotonyi, TAWIRI, MWIKA) | Academic institutions will provide technical and professional support to, as well as supply and maintain key datasets for, the project. <br> They may also be contracted, on a competitive bid basis, to implement specific research, technical and training/skills development project activities. |  |


|  |  | Sex |
| :---: | :---: | :---: |
| Tanzania Associa of Foresters | The Tanzania Association of Foresters will provide professional advice and support to the project in the implementation of activities. |  |
| Private sector |  |  |
| The private sector will be an important project partner in the ongoing development of FNRs as nature-based tourism and recreation destinations for local and international visitors. They will directly participate in the establishment, management and marketing of commercial concessions in FNRs. They may also assist in supporting, or partnering in, communitybased tourism/recreational nature-based tourism services and facilities in and around FNRs. Tourism operators may also, through theTanzania Association of Tour Operators, seek to include specific FNRs (and their unique attractions) into tour itineraries in order to increase visitor numbers (and hence income) to FNRs. <br> It is further envisaged that the private sector may procure carbon credits through voluntary carbon markets, as an investment in the rehabilitation and restoration of native forests in the FNRs. |  |  |

The Tanzania Forest Service (TFS) will be the main institution responsible for different aspects of project implementation. It will work in close cooperation with all other affected institutions.

## 2. Information dissemination, consultation, and similar activities that took place during the PPG

Throughout the project's development, very close contact was maintained with stakeholders at the national and local levels. All affected national and local government institutions were directly involved in project development, as were key donor agencies. Numerous consultations occurred with all of the above stakeholders to discuss different aspects of project design. These consultations included the following:
(i) At the national level, consultations were held in Dar es Salaam with the senior management of the TFS, the office of the Office of the Vice President's Office (Environment) and the UNDP CO. These meetings were designed to seek clarification as well as confirmation of government commitments, particularly related to co-financing of the project.
(ii) A series consultative visits to, and meetings with the management of, all the target 6 FNRs located in Mbeya, Kagera, Lindi, Morogoro, Tanga and Kilimanjaro regions were undertaken. These meetings sought to collect evidence-based data, driven by the reality on the ground.
(iii) Consultative workshops were organized in Dar es Salaam with representatives of all key NGOs currently implementing activities in target FNRs in order to understand the scope of their projects and explore possibilities for synergy, including co-financing.
(iv) A consultationmeeting was held in Morogoro, bringing together all the conservators from the 11 FNRs, to review the draft project document and provide the necessary comments on the accuracy, adequacy and practicability of the proposed interventions.
(v) Aconsolidated stakeholder workshop was convened in Morogoro, where project activities were presented for approval and endorsement by all stakeholders. This workshop included representatives from key government Ministries (i.e. Ministry of Natural Resources and Tourism, Ministry of

Agriculture Food Security and Cooperatives, Ministry of Livestock Development and Fisheries, Ministry of Water and Irrigation, Ministry of Industries Trade and Marketing, PMO-RALG, training and research institutions, development partners, NGOs and civil society partners.
(vi) Finally, after the draft documentation wasprepared, it was then circulated for finalreview and comments and inputs.

## 3. Approach to stakeholder participation

The projects approach to stakeholder involvement and participation during project implementation is premised on the principles outlined in the table below.

| Paimeiple | Stakelidher participation will: |
| :--- | :--- |
| Value Adding | be an essential means of adding value to the project |
| Inclusivity | include all relevant stakeholders |
| Accessibility and Access | be accessible and promote access to the process |
| Transparency | be based on transparency and fair access to information; main provisions of the project's <br> plans and results will be published in local mass-media |
| Fairness | ensure that all stakeholders are treated in a fair and unbiased way |
| Accountability | be based on a commitment to accountability by all stakeholders |
| Constructive | Seek to manage conflict and promote the public interest |
| Redressing | Seek to redress inequity and injustice |
| Capacitating | Seek to develop the capacity of all stakeholders |
| Needs Based | be based on the needs of all stakeholders |
| Flexible | be flexibly designed and implemented |
| Rational and Coordinated | be rationally planned and coordinated, and not be ad hoc |
| Excellence | be subject to ongoing reflection and improvement |

## 4. Stakeholder involvement plan

The project's design incorporates several features to ensure ongoing and effective stakeholder participation in the project's implementation. The mechanisms to facilitate involvement and active participation of different stakeholder in project implementation will comprise a number of different elements:

## (i)Project inception workshop to enable stakeholder awareness of the start of project implementation

The project will be launched by a multi-stakeholder workshop. This workshop will provide an opportunity to provide all stakeholders with the most updated information on the project and the project work plan. It will also establish a basis for further consultation as the project's implementation commences.

The inception workshop will address a number of key issues including: assist all partners to fully understand and take ownership of the project; detail the roles, support services and complementary responsibilities of TFS and FNRs staff vis à vis the adjacent communities; and discuss the roles, functions, and responsibilities within the project structure, including reporting and communication lines, and conflict resolution mechanisms.

The Workshop will also be a forum to: finalize the first annual work plan as well as review and agree on the indicators, targets and their means of verification, and recheck assumptions and risks; provide a detailed overview of reporting, monitoring and evaluation (M\&E) requirements; and plan and schedule project meetings for the Project Steering Committee.

## (ii)Constitution of Project Steering Committeeto ensure representation of stakeholder interests in project

A Project Steering Committee(PSC) will be constituted to ensure broad representation of all key interests throughout the project's implementation. The representation, and broad terms of reference, of the PSC are further described in Section I, Part III(Management Arrangements) of the Project Document.
(iii)Establishment of a Project Management team to oversee stakeholder engagement processes during project

The Project Management team - comprising a Project Coordinatorandpart-time Project Administrative Assistant (PAA)- will take direct operational and administrative responsibility for facilitating stakeholder involvement and ensuring increased local ownership of the project and its results. The Project Coordinator and PAA will be located close to, or in, the TFS offices in Dar es Salaam to ensure coordination among key stakeholder organizations at the national level during the project period.

## (iv) Project communications to facilitate ongoing awareness of project

The project will develop, implement and maintain a communications strategy to ensure that all stakeholders are informed on an ongoing basis about: the project's objectives; the projects activities; overall project progress; and the opportunities for involvement in various aspects of the project's implementation. This strategy will ensure the use of communication techniques and approaches that appropriate to the local contexts such as appropriate languages and other skills that enhance communication effectiveness.

## (v)Stakeholder consultation and participation in project implementation

A comprehensive stakeholder consultation and participation process will be developed and implemented for each of the following activities:

- Negotiation and formalization of agreement Memorandum of Understanding (MOU) between the FNRs and each adjacent village government;
- Beneficiation of local communities from their involvement in commercial tourism concessions/leases; and
- Identification and piloting of alternative income-generating activities in targeted FNRs.

A participatory approach will be adopted to facilitate the continued involvement of local stakeholders including the vulnerable and marginalized members of the community (including women) and institutions (such as NGOs and CSOs) in the implementation of the project activities within the targeted FNRs. Wherever possible, opportunities will be created to train and employ local residents from villages within, or adjacent to, the targeted FNRs

## (vi)Formal structures to facilitate stakeholder involvement in project activities

The project will also actively seek to establish formalised structures to ensure the ongoing participation of local and institutional stakeholders in project activities. This will be done through employment of Community Liaison Officers (CLOs) at each of the targeted FNRs. The primary responsibility of CLOs will be that of ensuring effective engagement of adjacent communities through creation of the necessary enabling environment (e.g. by identifying and addressing needs of the communities and identifying and providing the necessary incentives for their involvement).

## (vii)Capacity building

All project activities are strategically focused on building the capacity - at the systemic, institutional and individual level - of the targeted FNRs in order to ensure sustainability of initial project investments. Significant GEF resources are directed at building the capacities of TFS at the national and at the FNR levels as well as at the individual staff levels. The project will invest in building the capacities of executive management staff, planning staff and operational management staff. Wherever possible, the project will also seek to build the capacity of forest adjacent communities (e.g. local community groups and vulnerable and marginalized segments) to enable them to actively participate in project activities.

## 4. Coordination with other related initiatives

The project will work closely in partnership with NGOs and the EAMCEF to ensure complementarity of its activities in support of the protected area planning, development, management and expansion processes currently underway in Tanzania.

The project will actively participate in, and provide technical input into, the GEF-funded review and updating of the National Biodiversity Strategy and Action Plan (NBSAP) coordinated by the Division of Environment in the Vice President's Office (VPO) with support from GEF. Specific inputs will include sharing experience on communication systems, with emphasis on transparency, effectiveness, good governance, gender inclusiveness as well as aspects of capacity building, technology transfer and workable approaches for effective local community involvement.

The project will also collaborate closely with a number of national NGOs (TFCG, WCST, MJUMITA, MCDI, WCS) and international NGOs (WWF, CARE International in Tanzania, Jane Goodall Institute) that are currently implementing forest and biodiversity conservation activities adjacent to FNRs areas like in Amani, Nilo (in the East Usambara) and Magamba (in the West Usambara mountains).

Furthermore, the project will also cooperate with research and training institutions such as Sokoine University of Agricnlture and Tanzania Forest Research Institute (TAFORI) that are constantly conducting socioeconomic and environmental researches related to the targeted FNRs. One of the priority research areas requiring particular attention through research training relates to the projected impacts of climate change on FNRs as well as the possible resultant opportunities through REDD+ and PES.

The experiences learnt from the previously implemented projects, such as the UNDP/GEF Small Grant funded projects (e.g. "Improving livelihoods of Nilo Nature Reserve adjacent local communities through implementation of non-consumptive activities") will directly guide the achievement of project goals and the
implementation of the project activities. Other related projects that are currently being funded by GEF/UNDP in Tanzania and from which to draw lessons/share experiences with include: (i) the Lake Victoria Environmental Management Programme (LVEMP); (ii) Lake Tanganyika Integrated Environmental Management Programme and (iii) Strengthening the Protected Areas Network in Southern Tanzania (SPANEST) seeking to improving the effectiveness of National Parks in addressing threats to biodiversity in Southern Tanzania

Wherever practicable, the project will share capacity and resources with other projects (e.g. NGOs/CSOs) in the implementation of complementary project activities such as those targeting PES, REDD+ as well as initiatives aimed at improving the socio-econonnc and livelihood wellbeing of forest adjacent communities in and around targeted FNRs.

The project will seek to harmonize its outputs and activities - notably in respect of sustainable financing - with other regional initiatives (e.g. GEF/UNDP Small Grant Projects), through a close collaboration and information exchange with the relevant partners, such as NGOs that are currently implementing or planning to implement complementary initiatives in and around targeted areas.

The project will liaise closely with the Tanzania Forest Fund and the EAMCEF, to explore further opportunities for co-financing pilot and possibly incremental activities. It will specifically explore the prospects of sourcing financial support for developing sustainable and attractive business environment for private sector investments.

The project will, as required, use the capacity and resources of UNDP and the VPO to facilitate the regional sharing of lessons learnt from, and best practices developed in, project implementation.

## PART IV: Letters of co-financing commitment

[Refer to separate file for letters of co-financing commitment]

| UNDP |
| :--- | :---: | :---: | :---: |

Notes:

## PART V: METT, Capacity Development and Financial Scorecards

[Refer to separate files for individual scorecards]

| Scorecard |
| :--- |
| 1. Management Effectiveness Tracking Tool (METT) for 6 existing and 5 proposed Forest Nature <br> Reserves (see attached file) |
| 2. Financial Sustainability Scorecard for the Forest Nature Reserve sub-network (see attached file) |
| 3. Capacity Development Assessment Scorecard for the Tanzania Forest Service * |

* Summary scores for the capacity assessment scorecard are reproduced below.


## Summary scores table: Capacity assessment scorecard for national protected areas

Summary scores for strategic areas of support:

| Strategic Areas of Support | Systemic |  |  | Instifutional |  |  | Individual |  |  | Average $\%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Project Socres | Tolal possible scare | \% | Project Scores | $\begin{aligned} & \text { Total } \\ & \text { possible } \\ & \text { scare } \\ & \hline \end{aligned}$ | \% | Project Sares | $\begin{aligned} & \text { Tosi } \\ & \text { possible } \\ & \text { scare } \end{aligned}$ | \% |  |
| (I) Capacity to conceptualize and devebop sectoral and cross-sectoral policy and regulatory frameworks | 3 | 6 | 50\% | 2 | 3 | 67\% | N/A | NA | NA | 58\% |
| (2) Capacity to formulate, operationalise and inplement sectoral and cross sectoral programmes and projects | 4 | 9 | 44\% | 18 | 27 | 67\% | 7 | 12 | 58\% | 56\% |
| (3) Capacity to mobitize and manage partnerships, including with the civil socikty and the private sector | 4 | 6 | 67\% | 3 | 6 | 50\% | 2 | 3 | 67\% | 61\% |
| (4) Technisal skilk related specifically to the requirements of the SPs and associated Conventions | 2 | 3 | 67\% | 1 | 3 | 33\% | 1 | 3 | 33\% | 44\% |
| (5) Capacity to monitor, evaluate and report at the sector and project levels | 4 | 6 | 67\% | 2 | 6 | 33\% | 2 | 3 | 67\% | 56\% |
| TOTAL. Score and average for \%'s | 17 | 30 | 59\% | 26 | 45 | 50\% | 12 | 21 | 56\% | 55\% |

Summary of systemic, institutional and individual capacity:

| Systemic capacity | $17 / 30$ | $59 \%$ |
| :--- | :--- | :--- |
| Institutional capacity | $26 / 45$ | $50 \%$ |
| Individual capacity | $12 / 21$ | $55 \%$ |

## PART VI: Technical Reports and Information

## PPG Technical Report

'Enhancing the Forest Nature Reserves Network for Biodiversity Conservation in Tanzania:
Baseline Analysis and Costing' (2014)
(Refer to separate file attached)

## Selected references:

Anon. 2010.Eastern Arc Mountains Forests of Tanzania. Nomination of properties for inclusion on the World Heritage List (Serial Nomination):

Anon. 2013.Executive Summary: Baseline survey report for the 8 Nature Reserves and 1 National Park in the Eastern Arc Mountains of Tanzania. EAMCEF.

Bayliss, J., et al., The current and future value of nature-based tourism in the Eastern Arc Mountains of Tanzania. Ecosystem Services (2014), http://dx.doi.org/10.1016/j.ecoser.2014.02.006i

Burgess, N.D. et al. 2007.The biological importance of the Eastern Arc Mountains of Tanzania and Kenya. Biol. Conserv.134, 209-231.

Fisher, B. et al. 2011. Measuring, modelling and mapping ecosystem services in the Eastern ArcMountains of Tanzania.Prog. Phys. Geogr. 35, 595-611.

Green, J.M.H. et al. 2012.Estimatingmanagementcostsofprotected areas: anovelapproachfromtheEasternArcMountains.Tanzania.Biol. Conserv.150,5-14.

Green, J.M.H. et al. 2013. Deforestation in an African hotspot: extent, variation, and the effectiveness of protected areas. Biol. Conserv. 164, 62-72.

Nelson, F. et al. 2009.Payments for ecosystem services as a framework for community-based conservation in Northern Tanzania.Conserv. Biol. 24(1), 78-85.

Swetnam, R.D. et al. 2010. Valuing ecosystem services in the Eastern Arc Mountains of Tanzania. Br. Ecol. Soc. Bull. 41(1), 7-10.


[^0]:    'For the sake of brevity, the United Republic of Tanzania (URT) is termed 'Tanzania' for the remainder of this Project Document.
    ${ }^{2}$ Communities have a strong autonomy in the use of village land, based on the rightsdeveloped under President Nyrere's 'ujama' villagisation programme in the 1970 s .
    ${ }^{3}$ The 1999 Village Land Act defines general land as 'all public land which is not reserved land or village land'. The 1999 Land Act however defines general land more broadly as 'all public land, which is not reserved land or village land and includes unoccupied or tonused village land'. The terms 'unoccupied' and 'unused' are not explictly defined in the act.

[^1]:    ${ }^{4}$ It is however misleading to compare values and rankings with those of previously published reports, because the underlying data and methods have changed.
    ${ }^{s}$ The MPI identifies multiple deprivations in the same households in education, health and standard of living. The education and health dimensions are based on two indicators each, while the standard of living dimension is hased on six indicators.
    ${ }^{6}$ If the household deprivation score is 33.3 percent or greater, that household (and everyone in it) is considered multidimensionally poor.

[^2]:    ${ }^{7}$ Using the ATLAS method (World Bank, 2013).

[^3]:    ${ }^{8}$ Serengeti-Ngorogoro; Lake Manyara and East Usambara Biosphere Reserve.
    ${ }^{9}$ The Minister may declare, by order (published in the national gazette) any area of land to be a NFR.
    ${ }^{10}$ The Minister may declare, by order (published in the national gazette) any area of land to be a LAFR.

[^4]:    ${ }^{11}$ Most of the montane forests possess high water catchment value and are the main sources of major rivers, including the: Great and Little Ruaha; Kilombero; Wami; Ruvu; Kihansi; Pangani; and Zigi rivers.
    ${ }_{13}^{12}$ Except in limited cases - such as Amani FNR, where access agreements for collection of dead wood are in place.
    ${ }^{13}$ There is currently limited/no dedicated conservation management staff, infrastructure and equipment.

[^5]:    ${ }^{14}$ These include: waiving state royalties on forest produce; retaining $100 \%$ of revenue from sale of forest products; levying and retaining fine; exemption from the "reserved tree species list"; and confiscation of forest produce harvested illegally and equipment used in the process.
    ${ }^{\text {is }}$ To date.the vast majority of JMAs that have been developed between villages and central government cover montane catchment forests with high biodiversity and other ecosystem-service values. Given the high conservation status of many of the forests under joint management arrangements, the total level of permitted benefits that may be legally harvested from the forests is very low.
    ${ }^{16}$ The government is however currently finalizing the guidelines for benefit sharing in JFM arrangments.

[^6]:    ${ }^{17}$ The hierarchical reporting line between the Conservator and the affected District Manager is however not yet clearly defined.

[^7]:    ${ }^{18}$ But not to collect fines.
    ${ }^{19}$ The Forest Policy is currently under review. A revised policy is expected to be adoptedin 2014.
    ${ }^{20}$ The NFP is currently also under review.A revised Forest Programme is expected to be adopted in 2014.
    ${ }^{21}$ These guidelines are currently in the process of being revised and updated. A revised set of guidelines are expected to be adopted and gazetted in 2014.
    ${ }^{22}$ The TFS Strategic Plan is currently also under review. A revised Strategic Plan is expected to be adopted in 2014

[^8]:    ${ }^{23}$ Between 1990 and 2010, mainland Tanzania lost 8 million hectares ( $\sim 19$ per cent) of its forest cover, equivalent to an average annual loss of about 400,000 hectares.
    ${ }^{24}$ Where: red represents a very high ranking of threat; orange a high ranking; yellow a medium ranking; and green a low ranking.

[^9]:    ${ }^{25}$ Exact extent still to be verified.

[^10]:    ${ }^{25}$ Exact extent still to be verified.

[^11]:    ${ }^{26}$ For example, it is estimated that the projected temperature and rainfall changes could decrease the average annual maize yield by $33 \%$ and thecotion and coffee yields by up to $20 \%$.

[^12]:    ${ }^{27}$ By example: (i) Illegal logging is occuring regularly in Kilombero, Rondo, Chome, Amani, Nilo and Uluguru, Minziro and Rungwe - often in collusion with local village leaders; (ii) Poaching and illegal hunting in Kilombero, Uzungwa Scarp, Rungwe are reaching critical levels - with some endemic and rare species (e.g. Abbot's duiker and the monkey,Rungwecebus kipunji) under threat of local extirpation; (iii) Where rangelands are scarce, pastoralists are illegally encroaching into FNRs - such as Rungwe for access to grazing for livestock; and (iv) Subsistence farmers are illegally encroaching into FNRs for cultivating food crops (e.g. Kilombero) or cash crops (e.g. Mkingu).
    ${ }^{28}$ The legal status of JFM regarding the sharing of costs and benefits remains unclear. Section 16 of the Forest Act (2002) states that a Joint Management Agreement (JMA) for the management of a forest may be made between various parties, while Section 16 (2) (h) states that the agreement shall include "rules regulating access to, use and division of, and management and audit of any funds which may be made available for, or are generated by the implementation of the agreement". The Act however, provides no guidance on how the benefits arising from forest management under JFM are to be shared, or the preferred mechanism for doing so. The draftJoint Forest Management Guidelines (MNRT, 2007)proposed that direct cash payments be made by the Ministry of Finance and External Affairs (MFEA) to participating communities, but this was not supported by the MFEA.
    ${ }^{29}$ At the reserve level, these JMAs typically take the form of a Memorandum of Understanding (MOU).

[^13]:    ${ }^{30}$ Although the $2013 / 2014$ budget makes provision for an FNR budget of $\sim$ US $\$ 919,000$, typically only $40-55 \%$ of the planned budget is actually spent in situ.
    ${ }^{31}$ Indirect Cost Rate is the ratio (expressed as a percentage) of an organization's total indirect costs (numerator) to its direct cost base (denominator).

[^14]:    ${ }^{32}$ A more detailed list of the threatened and endemic species in the 11 FNRs is appended in Section IV, Part VII

[^15]:    ${ }^{33}$ Rungwe has already been gazetted, but is not yet fully operationalised.
    ${ }^{34}$ Activities will start immediately in this FNR, as it is already gazetted.

[^16]:    ${ }^{35}$ Subsidiary plans for the reserve will provide a bridge between the broad strategic direction provided for in the RMP and the detailed, specific actions taken in the Annual Plan of Operation (APO). Subsidiary plans may deal with complex, technical, and sometimes controversial issues that often require a level of detail and thorough analysis beyond that appropriate for the Strategic Plan (Note: the subsidiary 'Tourism Plan' for each FNR will be developed under Output 2.1 below).

[^17]:    ${ }^{36}$ Equipped with extra fuel tank, bullbar, winch, tow bar and spotlights.

[^18]:    ${ }^{37}$ Offices may be designed to enable future expansion (e.g. using a modular design) as additional funds become available.

[^19]:    ${ }^{39}$ This structure may take the form of a Reserve Advisory Committee or Reserve Management Advisory Committee or similar.

[^20]:    ${ }^{33}$ This MOU will need to conform with the national guidelines for JMAs, but may include describing inter alia: (a) the transition arrangements for the village communities during the 'grace period', includingscale and extent of forest access and use by communities and spatial use zonation of the reserve; (b) the respective roles and responsibilities of the village government and the reserve management in the conservation and use of the reserve; (c) the distribution of benefits to the village deriving from the current and future conservation and use of the gazetted FNR; and (d) the nature and extent of involvement of the village community in the cooperative governance of the reserve.

[^21]:    ${ }^{36}$ Equipped with extra fuel tank, bullbar, winch, tow bar and spotlights.

[^22]:    ${ }^{37}$ Offices may be designed to enable future expansion (e.g. using a modular design) as additional funds become available.

[^23]:    ${ }^{40}$ Potential opportunities that were preliminarily identified during project preparation included: a cableway linking Morogoro to Uluguru peak in Uluguru FNR; a five-star lodge and tented camp at an old sawmill site in Magamba FNR; a breakaway conference facility and accomodation at Amani FNR; and treetops accomodation, forest canopy boardwalks and forest zipline at Uzungwa Scarp and Kilombero FNRs.
    ${ }^{41}$ The TFS Tourism Concessions Manual for FNRs may be adapted from the recently revised TANAPA 'Development-ActionLease Procedures' manual for Tanzania's National Parks (1995, as updated).

[^24]:    ${ }^{42}$ For example, the International Finance Corporation (IFC).

[^25]:    ${ }^{43}$ The unique FNR branding will be subsumed under the institutional identity of the TFS.

[^26]:    ${ }^{44}$ Including lessons learnt from implementing Output 2.1.

[^27]:    ${ }^{45}$ For re-investment back into the conservation management of catchment forests.
    ${ }^{46}$ The project will also assess the efficacy of the current pilot PES arrangement between the Tanga Water Authority and nine villages in and around Amani FNR.
    ${ }^{47}$ By example the NGO TFCG currently administers the butterfly farming around Amani FNR ( $30 \%$ of income is for the management of the operation and $70 \%$ is distributed to the beneficiary communities)

[^28]:    ${ }^{48}$ The draft of the Fifth National Report (due for submission by $30 \mathrm{March}, 2014$ in accordance with the COP-6 and COP-9, decision 1X/8 of the CBD) further affirms this priority need.

[^29]:    ${ }^{49}$ The PD will not be paid from the project funds, but will represent a Government in-kind contribution to the Project.

