

SOUTH AFRICAN DEVELOPMENT COMMUNITY



Training Needs assessment for the development of Trans-boundary Conservation and Management of Natural Resources in TFCAs of the SADC Region

Phase I – Country: Tanzania

Draft Report



KfW



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A development program of the SADC co-financed by the Federal Republic of Germany through KfW. BMZ Project Number: 2011 66 685.

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Abbreviations

| | |
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| CAWM | College of African Wildlife, Mweka |
| CBC | Community Based Conservation (a process) |
| CBCT | Likuyu Sekamaganga Community Based Conservation Training Center |
| CBET | Competence – Based Education Training |
| CBO | Community Based Organisation (an institution) |
| CCS | Community Conservation Service |
| EAC | East African Community |
| FAO | Food and Agriculture Organization |
| FBD | Forestry and Beekeeping Division |
| FZS | Frankfurt Zoological Society |
| GIS | Geographical Information System |
| GPA | Grade Point Average |
| GR | Game Reserve |
| GTZ | Deutsche Gesellschaft für Technische Zusammenarbeit |
| HD | Higher Diploma |
| HRM | Human Resources Management |
| IUCN | International Union for Conservation of Nature |
| ISLUP | Integrated Spatial Land Use Planning |
| KfW | Kreditanstalt für Wiederaufbau |
| LUP | Land Use Plan |
| MoNRT | Ministry of Natural Resources and Tourism |
| NACTE | National Council for Technical Education |
| NCAA | Ngorongoro Conservation Area Authority |
| NGO | Non – Government Organization |
| NP | National Park |
| PA | Protected Area |
| PAS | Protected Area System |
| PG | Postgraduate |
| PWTI | Pasiansi Wildlife Training Institute |
| REDD | Reduction of Deforestation and Desertification |
| SADC | Southern African Development Community |
| SCIP | Support for Community Initiated Projects |
| SNEC | Selous Niassa Ecological Corridor |
| TANAPA | Tanzania National Parks |
| TFCA | Trans Frontier Conservation Area |
| TOR | Terms of Reference |
| UNDP | United Nations Development Program |
| VETA | Vocation and Education Training Authority |
| WD | Wildlife Division |
| WMA | Wildlife Management Area |
| WPT | Wildlife Policy Tanzania |
| WWF | World Wide Fund for Nature |

ACKNOWLEDGEMENT AND DISCLAIMER

I would like to thank the staff of Tanzania's Wildlife Division, Forestry Division, TANAPA NCAA and the Mweka Wildlife College for their time and input provided to this evaluation and their openness in the discussions held. Special Thanks are extended to Mr. Mwanauta for his technical input and logistical support.

The views and opinions of the author expressed herein do not necessarily state or reflect those of SADC and the Tanzania Government, the German Government, KfW, GIZ or WWF, and shall be treated confidentially and not be used towards third parties. The information presented in the report reflects the data collected from different sources encountered during the mission. No guarantees are given as to the accuracy and completeness of this document and liability for omissions and errors of its contents is disclaimed. A list of persons contacted and interviewed is attached (Annex 1).

0 EXECUTIVE SUMMARY

The Tanzania Country Report provides an overview of training needs related to protected area personnel and affiliated communities under the authority of the Ministry of Natural Resources and Tourism; furthermore a capability assessment of the country's major training facilities, training providers, programs and curricula related to the subject matter. Also an attempt is made to identify training-related gaps with special emphasis on Tanzania's REDD+ Program.

Situation Analysis and Framework Conditions for Conservation Training

To date Tanzania has not fully embraced the concept of trans-frontier conservation. Except for the Selous-Niassa Ecological Corridor that connects two of Africa's largest conservation areas, no trans-boundary conservation area has yet been established, although dialogue and un-offical trans-boundary cooperation agreements in support of synchronized conservation management for joining protected areas appear to exist.

Tanzania is known for its stable democracy and to be safe, important parameters for international tourism. It is one of Africa's richest countries in terms of biodiversity constituting a prime nature-based tourism destination. At the same time Tanzania's poverty-stricken population of 46 Mio places a great burden on the Government which still depends on direct donor-funded budget contributions to cover its operational costs and priority sector needs: health, education and other social infrastructure.

Pertinent Background Information

Biodiversity conservation, protected area management, wildlife management and forest management fall under the jurisdiction of Tanzania's Ministry of Natural Resources and Tourism (MoNRT). The Wildlife Division (WD), one of the Ministry's four Divisions, is responsible for the protection and sustainable management of the country's Game Reserves and wildlife outside protected areas which also includes Wildlife Management Areas.

The country's National Parks are managed by the Parastatal Tanzania National Parks (TANAPA) reporting to the Ministry. The Parastatal Ngorongoro Conservation Area Authority (NCAA) is responsible for the Ngorongoro Conservation Area (NCA).

The training of protected area personnel from the WD, TANAPA and NCAA is the responsibility of three training centers: (a) the Parastatal College of African Wildlife Management (CAWM) providing training to mid- and upper level protected area management personnel; (b) the Pasiansi Wildlife Training Institute (PWMTI) providing training to operational level personnel; and the Likuyu Sekamaganga Community Based Conservation Training Center (CBCTC) created to cater to the training needs of Wildlife Management Areas (WMAs)..

The Forestry and Beekeeping Division (FBD) of the MoNRT is mandated to protect and manage the country's forests.

The Tanzania Wildlife Research Institute conducts wildlife research in Tanzania providing scientific information and advice to the Government and wildlife management authorities on the sustainable conservation of wildlife.

Institutional analysis related to Protected Areas

(a) In spite of the WD's strong financial resource base (i.e., \$ 23 Mio from tourist hunting, and wildlife viewing alone) the WD, a staff line Division of the MoNRT, is severely under-staffed, under-budgeted and under-equipped. All revenues generated by the WD are returned to the Treasury and only a small portion is being returned to the WD's operational budget. The past three-year ban on recruitment of much needed personnel imposed by the MoNRT has resulted in lack of infrastructure maintenance in Game Reserves, and shortages in frontline staff which cannot fully comply with its functions and responsibilities. The WD has an inadequate operational capacity to monitor and control encroachment and human activities in game reserves and to adapt to climate change, both posing major challenges. At current a review of the Wildlife Divisions is being implemented with the aim of restructuring the WD. One of the most favourable options considered is conversion into a semi-autonomous Parastatal modeled after TANAPA.

(b) Wildlife Management Areas continue to be established in mostly connection with designated protected areas to reduce poaching pressure on wildlife populations, and ensure that local people benefit from their conservation. WMAs are created under the umbrella of the MoNRT through the Wildlife Division. At current 38 WMAs involving 333 villages with a total of 333 000 beneficiaries are registered and/or awaiting approval. Seven WMAs are located in the Selous-Niassa Ecological Corridor TFCA. Existing and planned WMAs cover an estimated 30,000 km². All registered and processed WMAs, related training of community leaders and village scouts has been financed by donors.

(c) Tanzania National Parks, a self-financing Parastatal is responsible for the management of the country's 15 national parks (NP). Nature-based or wildlife tourism is the main source of income. Most of the revenue generated is retained by TANAPA for management; 10% of TANAPA's revenues are returned to Treasury, and 7.5% to support zone communities (benefit sharing). On average 80% of TANAPA's Rangers are recruited from the National Service. After recruitment TANAPA sends the trainees to Pasiansi or Mweka for a one-year certificate course.

(d) The Ngorongoro Conservation Area NCA was created in 1959 as the only multiple land-use protected area in Eastern Africa promoting the dual goals of conservation and human development. The 8,300 km² NCA is managed by the Ngorongoro Conservation Area Authority, the governing body that regulates use and access to the NCA. It was created in 1995 as a parastatal self-financing organization generating \$ 3.5 Mio from gate fees and concessions/a. The NCAA has 500 employees, of whom 184 work exclusively with the 64 000 Maasai and the roughly 250 000 livestock using the crater and NCA. The low staff turn-over rate averages 5 replacements/a. Frontline staff needs to be augmented by 300 persons to adequately deal with growing problems related to multiple land use and the rapid growth of the resident Maasai population. The low NCAA budget (\$ 3.5 Mio generated vs. \$ 8 Mio needed) does not permit road maintenance, considered one of the biggest problems. The NCAA supports the access and trough road to Serengeti National Park (NP).

(e) The Selous-Niassa Ecological Corridor TFCA forms part of the 154.000 km² Selous – Niassa miombo woodland ecosystem of southern Tanzania and northern Mozambique connecting two of the largest conservation areas in Africa: the Selous Game Reserve of Tanzania and the Niassa Game Management Area of Mozambique. The two protected areas are linked by a corridor of approximately 120 km in length and about 50 km in width. The currently implemented KfW-funded corridor development project aims at the enhancement of the conservation efforts for this eco-region making use of its widely acknowledged economic potential as one of Africa's Key wildlife areas to be used for eco-tourism and sustainable natural resources management including wildlife utilization. Two WMAs encompassing more than 4,000 km² have been established as integral part of the

proposed corridor in its northern section bordering Selous. At current efforts are underway to establish a formal cooperation agreement with Mozambique aimed at joint trans-boundary management policies and law enforcement to reduce elephant poaching along the international boundary.

(f) Tanzania's Forestry and Beekeeping Division reports to the MoNRT. It is a quasi independent self-financing institution with revenues generated from forest management mostly retained by the FBD for its operational budget. The fully decentralized FBD is responsible for the sustainable management and protection of protected forests, productive forests, the extensive woodlands and the implementation of the country's REDD+ strategy (total forest area of Tanzania is 33.5 million hectares, covering 37.8% of the country's land area). Forests are estimated to provide 90% of people's livelihood. Wood is the almost sole fuel source of the country's population 36 Mio people. The annual deforestation rate is an estimated 412,000 ha affecting both protected and unprotected forests. REDD+ in Tanzania is coordinated through the National Steering Committee, a Technical Coordination Committee and a National REDD+ Task Force with representation of the MoNRT. Tanzania recognizes the potential dangers as climate change may aggravate impacts of the high rates of deforestation, even though at the moment little is known about climate change effect on forests and how this may impact on the livelihoods of the communities.

Staff Levels and Training Needs of Personnel Related to Protected Areas

(a) The Wildlife Division does not sustain its own Human Resources (HRM) Unit which is integrated into the central HRM Office of the MoNRT. As a result of the Ministry's recruitment stop vacant positions have not been filled for three years. Currently the Wildlife Division is staffed with 1462 persons vs. 4588 required. Currently, one game scout patrols 159.7 km² while the standard is one well equipped scout for 25 km². The WD sustains 8 Ant poaching Units with a combined total of 238 rangers (ideally 550). On average, 85% of the Junior Ranger recruits are taken from the National Service. Entry requirements of Junior Rangers are: (a) high school Diploma and Certificate in wildlife management or related field, or (b) high school diploma and completed military service. After recruitment Junior Rangers are sent for a one-year certificate course in basic wildlife management to the Pasiansi or Mweka training centers. Training costs are carried by the WD. The minimum entry requirements of upper management personnel are a Diploma and/or a BSc in wildlife management, a related field or in the area of expertise described in the advertised job announcement respectively. Approximately USD 120,000/a are currently being allocated for staff training. Staff turn-over rate is difficult to estimate due to the large number of forced openings. The total personnel needs at current are approximately 2000 (80% at ranger level). The current training needs to upgrade personnel is estimated at 400/year (340 frontline staff, 60 upper management personnel). If the Wildlife Division is converted into a parastatal agency the training needs of the new organization will be significant.

(b) Wildlife Management Area related training is aimed at community leaders and scouts. To date all training has been provided by the Likuyu Sekamaganga Community Based Conservation Training Center and to a lesser degree by Pasiansi. Entry requirements of scouts is literacy and proven field skills. Since community leaders are generally democratically elected for a limited term, the turn-over rate is relatively high requiring training of new community leaders after each term. Training needs at present are 3500 scouts for a refresher course, and 1000 scouts and 600 community leaders in need of base training. The greatest challenge is the shortage of funding for trainees.

(c) Tanzania National Parks has the same entry requirements of frontline personnel and upper management staff as described for the Wildlife Division. On recruitment rangers are

sent on a basic Certificate course to Pasiansi or Mweka. At present 30-50 rangers are trained annually at Pasiansi or Mweka; TANAPA pays tuition and salaries of trainees. In-service training on special skills required and refresher course packages are extended to about 80 rangers/year. TANAPA provides annual financial contribution to Mweka and Pasiansi to cover part of the operational cost. An Internal TANAPA Memo on training needs and gaps recommends to provide general short-term training to 64 upper management staff/a, short-term local training on specified subjects to 100 mid- and upper management staff/a, and in-house training to 100 frontline personnel/a. Due to financial constraints TANAPA is unable to follow up on its own recommendations at this point in time.

(d) The NCAA staff entry requirements, recruitment procedures, and post-recruitment training are standardized and the same as for TANAPA and the Wildlife Division. Rangers are hired mostly from the National Service. The NCAA pays for all training of its staff. Like TANAPA and the WD, the NCAA provides an annual financial contribution to both, Pasiansi and Mweka. Training needs specified by the NCAA are 20-30 rangers/year in need of refresher- and special skill courses, and 20 senior management staff/year to-be selected for specialty short-courses. There is a need for 200-300 additional rangers requiring a Certificate base course in wildlife management.

(d) The Selous-Niassa Ecological Corridor TFCA training program of for community leaders, CBO representatives and scouts, and the new WD's anti-poaching unit is financed by the KfW-sponsored project. There is an additional training need related to the five older WMAs associated with the Corridor (estimated 300 village scouts in need of refresher course and at least 80 community leaders and CBO staff in need of a base course as offered by the Likuyo Training Center).

(e) The Forestry and Beekeeping Division and REDD+Program have been severely affected by the Ministry's recruitment stop. Personnel gaps are most noticeable within the frontline staff. Recognized training needs are enormous throughout the FBD, especially with regards to REDD+ issues. An estimated 500 mid-and upper level staff is in need of short-term specialty training related to REDD+ as well as an estimated 800 forestry rangers and 10, 000 community representatives.

Protected Areas and Conservation- Related Training Facilities and Providers

(a) Tertiary knowledge-based education (BSc and MSc degrees related to natural resource management and other standard faculties) are provided by five well established and recognized Universities. The WD, TANAPA, NCAA, and the Forestry and Beekeeping Division draws on Graduates from these Universities for their needs in upper management and administrative staff. (b) The African Wildlife College concentrates on Certificate and Diploma programs aimed at middle and upper PA staff; it also offers demand- and performance-based BSc programs in wildlife management and tourism. All tertiary degree programs of the referenced educational facilities are accredited in Eastern Africa and the SADC Region. (c) The Pasiansi Wildlife Training Institute offers basic wildlife and tourism Certificate courses and short-term custom-tailored modules and seminars aimed at the frontline staff level of the WD, TANAPA and NCAA. (d) The Likuyo Sekamaganga Community-based Conservation Training Center offers country-wide training to Village Scouts and Community- and CBO Leaders of Wildlife Management Areas.

Ad (a) The African Wildlife College was established in 1963 as Parastatal under the umbrella of the MoNRT. The College is financially supported by the MoNRT, with annual contributions to its operational budget by TANAPA, the WD and NCAA. The wages of the 80 staff are provided by the Ministry. The well managed, well equipped and financed College is the oldest regional training center in Africa. It enjoys a high reputation

throughout the SADC Region. It has a favourable student-lecturer ratio of 15 to 1 and has been operating at full capacity for the past two years. It offers long-courses and demand-driven custom-tailored short courses in wildlife management and tourism. The 30 permanent lecturers (all hold an MSc degree) are highly motivated due to good framework conditions as reflected by the zero turn-over rate (except for death and retirement). Most of the \$ 3.4 Mio budget is generated through student tuition. The College prides itself as performance- and field-oriented training facility. It has a well functioning and sufficiently large infrastructure to operate at full capacity (500 students/a). At present no scholarships are available. Most of the students originate from Tanzania. The lack of scholarships and bursaries is responsible for the poor attendance of students from other African countries although the demand for training at the College is very high surpassing its capacity.

(b) The Pasiansi Wildlife Training Institute was established in 1966 as a game scouts training centre. Following a major curriculum review in 1987 it changed its name to „Pasiansi Wildlife Training Institute“ (PWTI). The PWTI is financially supported by the WD, TANAPA, and NCAA with budget aid from the MoNRT. It operates under the tutelage of the WD offering a one-year modular course and short courses to operational level personnel from Tanzania's Wildlife Division, TANAPA, NCAA, District Councils, Village Governments, Private companies and individuals, and other agencies dealing in conservation of natural resources. Periodic curriculum reviews are undertaken to adjust to skills, knowledge and attitudes for game scouts and rangers in accordance with new challenges and demands as required by the clients. The PWTI has a permanent staff of 40, with wages paid by the Ministry of Natural Resources and Tourism. Main curricula and programs offered are technician Certificates in wildlife management and tourism, either in modular form or one year training courses.

(c) The Likuyu Sekamaganga Community Based Conservation Training Center is a Government Institution reporting to the Wildlife Division of the MoNRT. The Center was developed jointly by the Ministry, Selous Game Reserve and the Selous Conservation Programme/GTZ in 1995, and renovated with GTZ funding in 1996. The Center is located in Likuyu offering base training to village game scouts, village leaders and executives of Community Based Organizations, enabling the trainees to effectively participate in Community-based conservation and sustainable land and resource use management. It currently concentrates on two basic training packages: (a) a 6 weeks village scout training program with a capacity of 40 participants per event, and (b) a two weeks course for village executives with a maximum of 30 participants. Most trainees are either sponsored by donors or by the respective District. The part-time instructors (5 persons) are supplied by the District, the Wildlife Division and the Selous Game Reserve, and the 4 full-time instructors are supported by the Wildlife Division in Dar es Salaam that also covers shortfalls in the operational budget of the Center. The training facility has been operating at between 60 and 90% of its capacity since its establishment in 1996. The facility requires upgrading of infrastructure and training-related equipment in order to meet acceptable standards.

Conclusions and Recommendations

The training need assessment has clearly shown that knowledge and skill requirements related to the country's protected area system are mostly associated with areas outside protected area boundaries, composed of Wildlife Management Areas and Support Zones. Recognized gaps in knowledge and skills of PA personnel mostly relate to communication, how to deal with PA neighbours, sustainable development and resource use, livelihood questions, and how to raise the level of environmental and conservation awareness within PA neighbour communities.

Whereas knowledge and skill requirements related to WMA and PA support zone communities should focus on responsible forest stewardship and conservation

management and sustainable resource use as related to the ambitious goals of the extended REDD+ Programs. Major training emphasis and knowledge transfer has to be placed on CBNRM measures to-be compatible with biodiversity conservation.

The training facilities of the Likuyo Community Training Center and Pasiansi appear to be the most suitable to tackle this challenge as it relates to protected areas and WMAs. Corresponding training and knowledge transfer should also make provisions for mobile training units to be used for on-site training and provisions for on „campus“ training delivery.

The general assessment of training needs has shown that there is an enormous quantitative demand for training professional staff, CBOs, community scouts etc. The assessment has also shown that Tanzania has sound training facilities of sufficient infrastructure and staff to cater to all four levels of PA and support zone related personnel. Available curricula and training modules addressing all training needs of PA- and conservation management related personnel are either available or can be adjusted at any time to arising needs (except for REDD+ related training needs and programs).

By far the most critical gap, however, is the lack of funding to meet the enormous demand for training in the country. Chronic budget constraints of the Government combined with other priorities do not permit to cover the financial shortfalls related to the required conservation training needs.

Given that funding of fellowships, bursaries, short-term group training associated with protected areas and their support zones, TFCAs and ecological corridors, is the most serious and well recognized bottleneck of training requirements within Tanzania and the SADC Region at large, it would appear prudent to fully concentrate on this critical issue.

The current survey results appear to substantiate the increasing difficulties Colleges are facing in drawing trainees from SADC member states to the two regional Wildlife Colleges Mweka and SAWC due to the lack of donor funding of fellowships and bursaries.

Against this background and with due consideration of cost-effectiveness it is recommended to establish a **“Conservation Training Endowment Fund”** under the umbrella of the SADC Secretariat to be modelled after the Global Environmental Facility but to be set up as Endowment- not a Sinking Fund in order to make the benefits sustainable. The great advantage of Endowment Funds is that the invested capital is not touched and that the interest generated is sustainable. The proposed Endowment Fund should be accessible to all member states for PA-related training. Member states could apply for funds following a formalized but easy and transparent process, or receive allocations on an annual or as-needed basis to be decided by a Technical Committee reporting to the Board of the Endowment Fund.

The **cost-efficiency of investments into an Endowment Fund** generating sustainable income can be significant compared to infrastructure investments, if not invested wisely. Infrastructure investments may be short-lived. They cause follow-up maintenance- and replacement costs burdening operational budgets which for most training facilities in the SADC region show annual deficits. Infrastructure development may not necessarily generate incremental income through increased capacity and will not address, let alone solve the **Key issue of how to finance the huge training demand in the region and how to finance much needed scholarships, bursaries, training of PA frontline staff and CBNRM.**

1 INTRODUCTION

1.1 Background of the Study

In order to support Trans-frontier Conservation Areas (TFCA), the Financial Cooperation committed 10 million € for the improvement and expansion of existing training providers and the establishment of a regional / sub-regional Training System to enhance skills and knowledge for wildlife managers and rangers in Trans-frontier Conservation Management and beyond.

1.2 Objective of the study

The main outcome of the overall consultancy is a report on training needs for SADC TFCAs and Protected Areas at large to facilitate the sustainable conservation and management of natural resources in the SADC Region.

The Tanzania Country Report is expected to provide an overview of training needs of protected area personnel and affiliated communities -where quantifiable- of the country's protected area system and associated Wildlife Management Areas under the authority of the Ministry of Natural Resources and Tourism; furthermore, the results of a brief assessment of major training facilities, their training programs, delivery, and capacity in general. Additional information will be provided on identified training gaps, in particular related to the country's REDD Program.

The report will provide summary observations on Tanzania's perceived position on TFCAs and a more detailed analysis of the African Wildlife College Mweka (AWCM) having served Anglo-phone Africa as one of the Key wildlife training center for over 40 years.

1.3 Scope of work

According to the TORs approved by SADC, the geographical focus of the study will be

- A) On SADC TFCAs including key regions of German development cooperation in southern Africa to date (Limpopo, KAZA, Nyika Vwaza and Selous-Niassa) and
- B) On existing training providers at the sub-regional and national levels in the respective countries of the geographical focus.

Therefore the following countries will be visited by the Study Team:

- KAZA: Angola, Botswana, Namibia, Zambia, Zimbabwe
- Limpopo: Mozambique, South Africa
- Nyika Vwaza: Malawi, Zambia
- Selous-Niassa: Tanzania, Mozambique

It is relevant to mention, that the above listed TFCAs are all in a different development stage and so will be other conservation areas of the respective countries. In order to be able to assess current and future training needs, it is crucial to take stock not only of the established (i.e. the formally proclaimed) conservation areas but also of the pending ones (waiting for proclamation) as well as the ones emerging (i.e. in the conception phase).

In the above mentioned countries the study will look at relevant national training providers as well as relevant sub-regional training providers.

Where appropriate the geographical focus and scope of the training assessment is widened in order to include aspects relevant to the Training Needs Assessment for Wildlife Managers and Rangers and specific target groups of communities affiliated with protected areas.

1.4 Target group and beneficiaries of the study

The ultimate beneficiary group of the study is wildlife managers and rangers managing conservation areas in TFCAs and beyond. Other beneficiaries are communities located in support zones of protected areas, in particular communities entering into official conservation agreements with Protected Area Authority and the Government. Special attention in Tanzania is given to Wildlife Management Areas which are mostly associated with gazetted protected areas of different categories.

The intermediaries to the beneficiary group are the national and sub-regional training providers offering, training opportunities for wildlife managers, rangers, scouts and affiliated target groups with the objective to strengthen their knowledge, skills and capacities to implement their duties in conservation areas of TFCAs and the country's protected area system at large, and to facilitate sustainable development of Wildlife Management Areas (WMA) and communities affiliated with protected areas.

Further intermediaries to the beneficiary group are the relevant Directorates and their staff in the SADC secretariat as well as in the member countries of the geographical focus of this study who are in charge of trans-frontier conservation and management of natural resources.

Important stakeholders are the related Human Resource Management Departments (HRM) of the Ministries in charge of national protected area systems and TFCAs in the countries of the geographical focus of the study area as well as the related sub-sectors of the HRM Sector in the SADC Secretariat, dealing with cooperation in training for TFCAs and protected areas.

Other identified important stakeholders identified by the SADC Secretariat are institutions in charge of forest management, in particular in context with country-specific REDD+ initiatives and programs.

1.5 Understanding of Training

Training is understood to encompass different categories of themes, courses and learning. The kind of training which is relevant for this study is the training, which is targeting skills and knowledge enhancement for better job fulfillment by wildlife managers and rangers, village scouts and other target groups associated with national PA Systems. The relevant training categories encompass:

| Training category | Target group |
|--|--|
| Intermediate education and training: certificate levels and technical training | Rangers, Scouts level |
| Higher education and training: Certificate and Diploma levels and access to tertiary education | Wardens, Senior Managers and Directors level |
| Lifelong learning: short courses and workshops on relevant thematic areas | In-service training: Anybody at any level, specifically tailored for a focused need |
| Community-development: tailor-made short-courses and workshops, hands-on training | Community leaders, scouts and specific target groups (livelihood stabilization) of WMAs, Conservancies |

Training infrastructure is understood as encompassing all relevant physical structures to accommodate students, trainers, staff; deliver basic services (water, electricity, food, hygiene) and provide relevant equipment as well as material for training on site as well as off site.

On-site and off-site refers to the physical location of the classrooms of the institution delivering the training.

1.6 Understanding of conservation areas

Conservation areas are to be understood as any kind of gazetted protected area of any category included in the respective country PA system and other areas set aside *inter alia* for sustainable conservation (e.g., Conservancies, Wildlife Management Areas, Game Reserves, Ecological Corridors etc.).

Three main categories should be differentiated according to their different management regimes and legally constituted basis, because the needs for training might be hugely varying.

| | |
|-------------------------|---|
| Protected areas | National Parks, Reserves and other IUCN categories of gazetted conservation areas |
| Community managed areas | Community managed areas, proclaimed by the government and delegated to communities for conservation and income generation, such as: Trust (Botswana); Conservancies and Community Forests (Namibia); Coutada (Angola); Game Management Areas (Zambia), wildlife conservancies (Zimbabwe); Wildlife Management Areas (Tanzania); designated buffer zones (Malawi) |
| Commercial game or | Land with any kind of title deed held by third parties and |

| | |
|-----------------|--|
| tourism areas | managed for commercial purposes such as: Game farms, commercial conservancies, private reserves, tourism concessions |
| Forest Reserves | Designated Protection Forests, mostly related to watershed protection and biodiversity conservation |

1.7 Trans-frontier Conservation Areas compared to Trans-Boundary Protected Areas

Trans-frontier Conservation Areas (TFCAs) are generally large sections of a landscape straddling international boundaries of two or more neighbouring nations. TFCAs are characteristically composed of designated Protected Areas (any IUCN category) forest reserves, designated ecological corridors and other multiple use areas. The nature of TFCAs and the planning and management approach is similar to UNESCO Biosphere Reserves (landscape planning approach), composed of core areas (IUCN categories 1 and 2), transition zone and multiple use zone. Due to their generally large size and complexity both TFCAs and Biosphere Reserves require integrated spatial land use planning (ISLUP) on a landscape level as basis for optimum land use decisions. The rather complex planning process related to ISLUP is multi-disciplinary, participatory and transparent involving all key stakeholders affiliated with the target area. TFCAs require an administrative structure involving line ministries, technical institutions, private sector and communities of each participating country. The establishment of an operational and sustainable trans-boundary administrative structure of a TFCA as well as a Biosphere Reserve constitutes one of the biggest challenges. Special training requirements for TFCAs over and above traditional training of PA personnel are mostly related to ISLUP processes, CBOs and CBNRM and trans-frontier administration.

Trans-boundary Protected Areas (TBPA) on the other hand are simply two connected designated protected areas representing the same ecosystem (mostly National Parks or IUCN Category 3 designations) that straddle an international boundary of two or more neighbouring countries. TBPAs generally do not require complex ISLUP processes but designated support zones affiliated with the PAs involved. The support zones are subject to sustainable economic planning and development which also may require ISLUP.

Common to both TFCAs and TBPAs is the need for state-of-the art “Integrated Management Plans” and “Business Plans” for the designated IUCN 2 category protected areas and a “Sustainable Development Plan” for the affiliated multiple use areas. The administrative structure for TBPS can be confined to a ministerial Memorandum of Understanding (MoU) describing the nature of cooperation, and a Technical Committee with representatives from the countries involved elaborating joint synchronized management policies and guidelines for on-the ground operations. Training requirements apart from PA personnel are mostly restricted to CBOs and CBNRM. [Is there a difference here to the TFCAs?](#)

Comment [A1]: TBPAs share one boundary and represent the same ecosystem; usually there are only two joining PAs involved. TFCAs on the other hand are much more complex and may entail several PAs of different legal protection status connected by multiple use areas which have to be subject to integrated land use planning in order to safeguard the creation of ecological corridors which are needed to connect fragmented PAs.

2 SITUATION ANALYSIS

2.1 Determination of the Study area

This report covers the results of a country-wide quantitative and qualitative training needs assessment of protected area personnel, analyses training needs related to Wildlife Management Areas (WMAS), and provides an assessment of Key training facilities and training providers in the country.

To date Tanzania has not fully embraced the concept of trans-frontier conservation areas. Except for the Selous-Niassa Ecological Corridor that connects two of Africa's largest conservation areas (Selous Game Reserve in Tanzania and Niassa Reserve in Mozambique), no trans-boundary conservation area has yet been established, although dialogue and un-official trans-boundary cooperation agreements in support of synchronized conservation management for joining protected areas (i.e., Serengeti-Maasai Maraa etc.) exist. This report deals exclusively with national training needs related to the national protected area system (PAs), the Selous Niassa Corridor TFCA, and to a lesser extent with training needs related to REDD+; the latter in compliance with the SADC request for inclusion of this sector in the country training profiles.

Some Facts about Tanzania:

- Tanzania known for stable democracy and to be safe: important for international tourism.
- One of Africa's richest countries in terms of biodiversity, prime nature-based tourism destination.
- Opted for "upper" tourism, no mass tourism.
- Currently no larger scale donor project except Selous-Niassa corridor.
- Population of 46 Mio.
- Total Land surface area **947,300 km²**; **Tanzania is the world's 31st-largest country**
- Tanzania is one of the oldest known inhabited areas on Earth according to fossil remains of humans discovered in Tanzania.

2.2 Framework conditions for (TFCA-) Training

Biodiversity conservation, protected area management, wildlife management and forestry fall under the jurisdiction of Tanzania's **Ministry of Natural Resources and Tourism**

The Ministry is composed of the following four Sector Divisions:

- Wildlife
- Tourism
- Forestry and Beekeeping
- Antiquities

The Wildlife Division is responsible for the protection and sustainable management of the country's Game Reserves and wildlife in general which also includes wildlife of Tanzania's protected areas system and Wildlife Management Areas (see Fig.1).

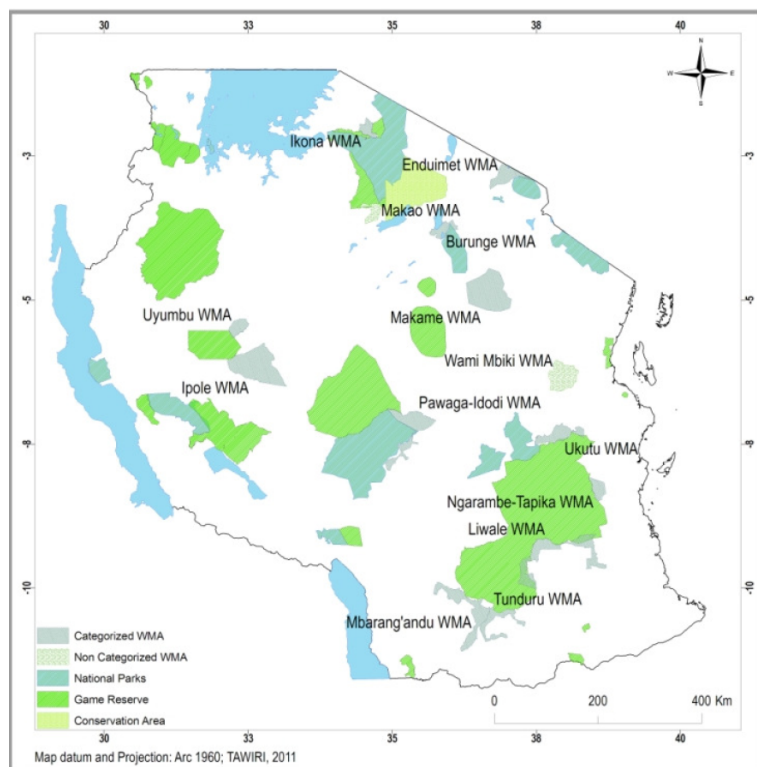


Figure 1: Protected Area System of Tanzania

The country's National Parks are managed by the Parastatal Tanzania National Parks reporting to the Ministry.

The Parastatal Ngorongoro Conservation Area Authority is exclusively responsible for the Ngorongoro Conservation Area.

The training of protected area personnel (WD, TANAPA and NCAA) is the responsibility of three training centers:

- Parastatal College of African Wildlife Management provides training to mid- and upper level protected area management personnel.
- Pasiansi Wildlife Training Institute provides training to operational level personnel.
- Likuyu Sekamaganga Community Based Conservation Training Center provides training to Community Leaders and Village Scouts.

The Forestry and Beekeeping Division (FBD) is mandated to protect and manage the country's forests which include Forest Reserves receiving special protection status.

2.2.1 Wildlife Division

The Wildlife Division is responsible for the management of Game Reserves, Game Controlled Areas, all wildlife outside protected area boundaries and wetlands. The WD facilitates the establishment of Wildlife Management Areas, creates awareness, and disseminates information about wildlife management to the village communities in their village lands.

The Tanzania Wildlife Research Institute administers wildlife research in Tanzania with an overall objective of providing scientific information and advice to the Government and wildlife management authorities on the sustainable conservation of wildlife.

Tanzania National Parks reports to the Ministry through the Wildlife Division.

Tanzania has established a network of protected areas under supervision of the WD covering some 25 % of the land surface area as a basis for conserving its country's biological diversity.

Administratively the wildlife sector has divided its mandates into Central and Local Governments. The Central Government includes ministries, executive agencies, and independent departments, and four Sector Divisions:

The local Government level includes District Councils, Wards and Village Councils. The role of Central Government (Wildlife Division) is to provide clear national policy and regulatory framework, stimulate and promote participation of various stakeholders in the implementation of policy, manage core wildlife protected areas, and providing professional standards and technical assistance in conservation and utilization of resources. The WD implements its mandate and functions in close cooperation with the four agencies that are responsible for managing the wildlife and wetlands laws in the country (i.e., TANAPA, NCAA, CAWM and the District Game Offices).

The following institutional analysis of the WD is based on an internal unpublished „Institutional Scoping Vision“ and related SWOT analysis prepared by the WD in support of discussions on re-structuring the Wildlife Division (Wildlife Division, 2011):

- i. Wildlife Division has a strong financial resource base. The commercial use of wildlife in terms of tourist hunting in the Game Reserves and Game Controlled areas alone contributed about USD \$ 21.450,234 Mio in the year 2010/11, photographic tourism USD \$ 2, 797,597 and live animal trade about USD 84,630.
- ii. Currently there are 376 staff houses in all game reserve and anti- poaching units against the required 692 houses needed. 54 airstrips are located in all game reserves (16 all weather strips and 38 in disrepair). The road network in all game reserves constitutes 25,697 km, out of these 11,179 km are all weather roads and the remaining 14,518 km seasonal. Poor road maintenance due to the lack of funds poses a major management problem.
- iii. Inadequate operational capacity to monitor and control encroachment and human activities in game reserves and to adapt to climate change are major challenges.
- iv. Limited opportunity to retain sufficient revenue for operations; WD under-budgeted, under-staffed, and under-equipped. Low remunerations and lack of incentives resulting in low staff morale, work ethics and motivation, leading to a loss of opportunity in more effectively promoting lucrative sustainable tourism and consumptive wildlife use and inadequate contributions of the wildlife subsector towards economic growth and livelihood improvement.
- v. According to the internal review: „The Wildlife Division has been operating based on the traditional way of doing business. This situation has led to delayed adoption of new changes especially in the use of appropriate technology and modern conservation ethos. A new culture to do business in Wildlife Division is not optional it is a must“.

The widely acknowledged Key problem responsible for the relatively poor performance and inadequacies of the Wildlife Division is its financial dependency on the National Treasury. All of the significant revenues generated by the WD are returned to Treasury, with only a fraction being returned to the WD for operations. This has led to serious financial constraints and a complete hiring stop of much needed personnel for the past three years. In order to remedy the situation efforts are currently made to re-structure the WD, possibly to be converted into a Parastatal such as TANAPA and the NCAA. Judging by the satisfactory performance of the latter two agencies, parastatal status for the WD could be a viable solution. German bilateral aid is currently considered to assist in achieving this structural change.

2.2.2 Wildlife Management Areas

Within the last few years, Tanzania has witnessed mushrooming growth of “Wildlife Management Areas” (WMAs), established to halt (or reduce) loss of wildlife populations, and ensure that local people benefit from their conservation. Key features related to WMAs are highlighted as follows:

- The WMA concept was first applied in 1996 to WMAs related to the Selous Game Reserve, established with financial assistance of a GTZ project.
- WMAs are established under the umbrella of the MONRT through the Wildlife Division.
- WMAs require ministerial approval after meeting all stipulations and conditions affiliated with the application process.
- WMAs mostly share boundaries with game reserves and other protected areas.
- At current 38 WMAs involving 333 villages with a total of 333 000 beneficiaries are registered and/or in different stages of approval (See Annex 2 for complete list of WMAs).
- 7 WMAs located in Selous-Niassa Ecological Corridor (KfW project, the only Tran frontier activity in Tanzania)
- Existing and planned WMAs cover an estimated 30,000 square km.
- All registered and processed WMAs are financed by donors.
- Most important donors in the past: GTZ, USAID, DANIDA, WWF, AWF. Other donors include Frankfurt Zoological Society, Africare, NORAD, WCS, and BTC.
- Each WMA involves 10 to 20 villages with 10-20 scouts per village.

Community Based Conservation has been integrated into the curricula of the wildlife training institutions of Tanzania (AWCM, CBCTC and PWTI) with the aim of building a cadre of personnel with the ability to implement the WMA approach. The CBCTC caters to country-wide WMAs training needs.

A recent country-wide training needs assessment related to existing and planned WMAs and areas earmarked for Community Based Natural Resource Management (including participatory forest management and community forest management under the new National Forest Policy from 1998) commissioned by the MoNRT, proved the growing demand for village scout and leadership training which is expected to utilize the existing training center CBCTC to its full capacity for years to come, pending the availability of funding to cover tuition fees for the trainees. In order to increase the capacities of the centre according to the expected demand additional infrastructure like dormitories, classrooms and a secure water supply will be necessary (see Chapter 2.2.5). For a detailed overview of WMAS and their status Annex 2 refers.

Key Challenges:

- WMA application process too long; in the past average 4 years; since 2012 new law shortening process to 18 months.

- Training of WMA village leaders and scouts depends exclusively on donor funding.

2.2.3 Tanzania National Parks

The Tanganyika National Parks Ordinance of 1959 established the organization now known as Tanzania National Parks (see Annex 3 for organigram). Serengeti became the first National Park. Conservation in Tanzania is governed by the Wildlife Conservation Act of 1974, which allows the Government to establish protected areas and outlines how these are to be organized and managed. National Parks represent the highest level of resource protection provided in the country. To date TANAPA has grown to 15 national parks (NP) with one additional in the process of being created and plans to expand existing parks. Nature-based or wildlife tourism is the main source of income. Most of the revenue generated is retained by TANAPA for management, regulation, fulfilment of all organisational mandates in the national parks.

According to studies by international development organizations, Tanzania National Parks is one of the most efficient and productive bureaucracies in Africa.

Facts related to TANAPA

- Created 1959 as self-financing Parastatal; serves as excellent working model throughout Africa according to donor consensus.
- Responsible for 15 NP + 1 currently being created with a total of 42,000 km² (equals one third of the area managed by the Wildlife Division).
- Excellent working relationship with WD; effective joint law enforcement and anti-poaching etc.
- Efficient and well equipped in-house Planning Unit responsible for management plans.
- Community Conservation Service (CCS); Outreach Programme of TANAPA, highly regarded by donors and in Tanzania; improve relationship with neighbours, training CBOs, school awareness etc.; Support for Community Initiated Projects (SCIP) fund was established in 1992; Total fund amounts to 7.5% of revenues generated from gate fees and concessions. used for social infrastructure development, environmental education and awareness building.
- Serious shortage of frontline personnel due to growing number of rangers used as tour guides and for outreach program.

The CCS started in 1988 as a pilot project under the Neighbours as Partners program, supported by the African Wildlife Foundation (AWF). Today CCS is a full-fledged department with permanently employed staff at the TANAPA headquarters and operated by all 15 National Parks.

Conservation education is a vital part of the CCS program. The program includes Park visits arranged for local community groups, pupils and students; community training on project management and accounting and the use of appropriate technology; Conservation Clubs are established in schools, teachers are trained and conservation films are shown in the communities.

SCIP funding has been used for the construction of schools, student dormitories, teachers' facilities, laboratories, medical dispensaries, health centres, youth centres, training centres, roads, libraries, water projects, the purchase of text books and school furnishings, the support of children's' rights, and many other community development projects.

2.2.4 Ngorongoro Conservation Area Authority

The Ngorongoro area originally was part of the Serengeti National Park created by the British in 1951. Maasai continued to live in the newly created park until 1959, when repeated conflicts with park authorities over land use led the British to evict them to the newly declared Ngorongoro Conservation Area. This led the official gazettment of the Ngorongoro Conservation Area (NCA) which was created in 1959 as the only multiple land-use protected area in Eastern Africa promoting the dual goals of conservation and human development.

The 8300 km² NCA is managed by the Ngorongoro Conservation Area Authority (NCAA), the governing body that regulates use and access to the NCA. It was created in 1995 as a parastatal organization.

It is noteworthy that there are no fences in the NCAA or anywhere in Tanzania which would be detrimental to the pastoral lifestyle of the rural people, especially the nomadic Maasai and their herds. The people of Tanzania and wildlife co-exist well without fences.

Challenges

- At current 184 rangers responsible for 8,300 km²; the recommended control area per ranger is 25 km². In order to comply with this stipulation a total of 332 rangers would be needed.
- NCAA financially autonomous but under-staffed and –budgeted; it generates 3.5 Mio USD from gate fees and concessions (vs. \$ 8 Mio required), allocated as follows:
 - 49% wages, administration and training.
 - 28% revenue tax to be returned to Treasury.
 - 8,5% to communities (mostly for social infrastructure such as hospitals, roads, education, water etc.).
 - Rest to tourism marketing, road maintenance, law enforcement, monitoring etc. Inside the NCA all roads are gravel roads. The NCA supports the through-road to Serengeti with a recommended capacity of 50 vehicles/day vs. 400/day at current causing extremely high road maintenance cost.

2.2.5 Selous-Niassa Ecological Corridor TFCA

With an area of 154.000 sq km the Selous – Niassa miombo woodland ecosystem of southern Tanzania and northern Mozambique forms part of one of the largest transboundary eco-regions in Africa. To the North it is bordered by the 47,000 sq km Selous Conservation area and to the South by the 42,400 sq km Niassa Game Reserve. The two protected areas are linked by the Selous-Niassa Ecological Corridor SNEC-TFCA of approximately 120 km in length and about 50 km in width (Fig.2). The Corridor TFCA establishment is currently subject to a KfW-funded EUR 5 Mio project aimed at the establishment of WMAs and strengthening WD representation and anti-poaching controls inside the Corridor.

Administratively the proposed corridor includes the two Districts of Namtumbo and Tunduru. The current project builds on work performed by the German Technical Assistance (GTZ), which had been involved since 1989 in the development of village Wildlife Management Areas (WMA) bordering the Selous Game Reserve (Schuerholz et al., 2005).

The SNWC, the first of its kind in the country, is expected to be instrumental in the application of the Wildlife Policy of Tanzania which envisions the establishment of corridors between important protected areas via the creation of WMAs to directly benefit communities. The current KfW Project is therefore fully supportive of the Wildlife Policy for which the Wildlife Division is the implementing authority.

Specific measures in support of the SNWC are:

- Facilitation of WMA establishment within the corridor (contiguous Land Use Plan).
- Establishment of two mobile anti-poaching units and a sub-station in Tunduru in support of the Songea Zonal Anti-Poaching Unit.
- Support to the planned District Ranger Outpost Station at Magazini.
- Establishment of a Ruvuma River Ranger station to control poaching activities along this ecologically important area.
- Support to the trans-boundary conservation process which seeks to address the cross-border issues in the protection and management of the Selous and Niassa protected areas.

Trans-frontier Cooperation Although initial steps have been taken for trans-boundary cooperation with the neighbouring Niassa Game Reserve and the Mozambican Ministry in charge of protected areas and wildlife the contacts made have not been formalized. Preliminary bi-national meetings allegedly have been perceived as very positive by both sides indicating the interest by both countries in close cooperation to be based on a formalized modus operandi that would mostly address joint anti-poaching policies and anti-poaching controls, but also joint management guidelines for the Ruvuma ecosystems shared by both countries. There is consensus that an effective trans-boundary law enforcement, anti-poaching control and joint land use management guidelines are a critical requisite for the sustainable protection of these trans-frontier fragile ecosystems.

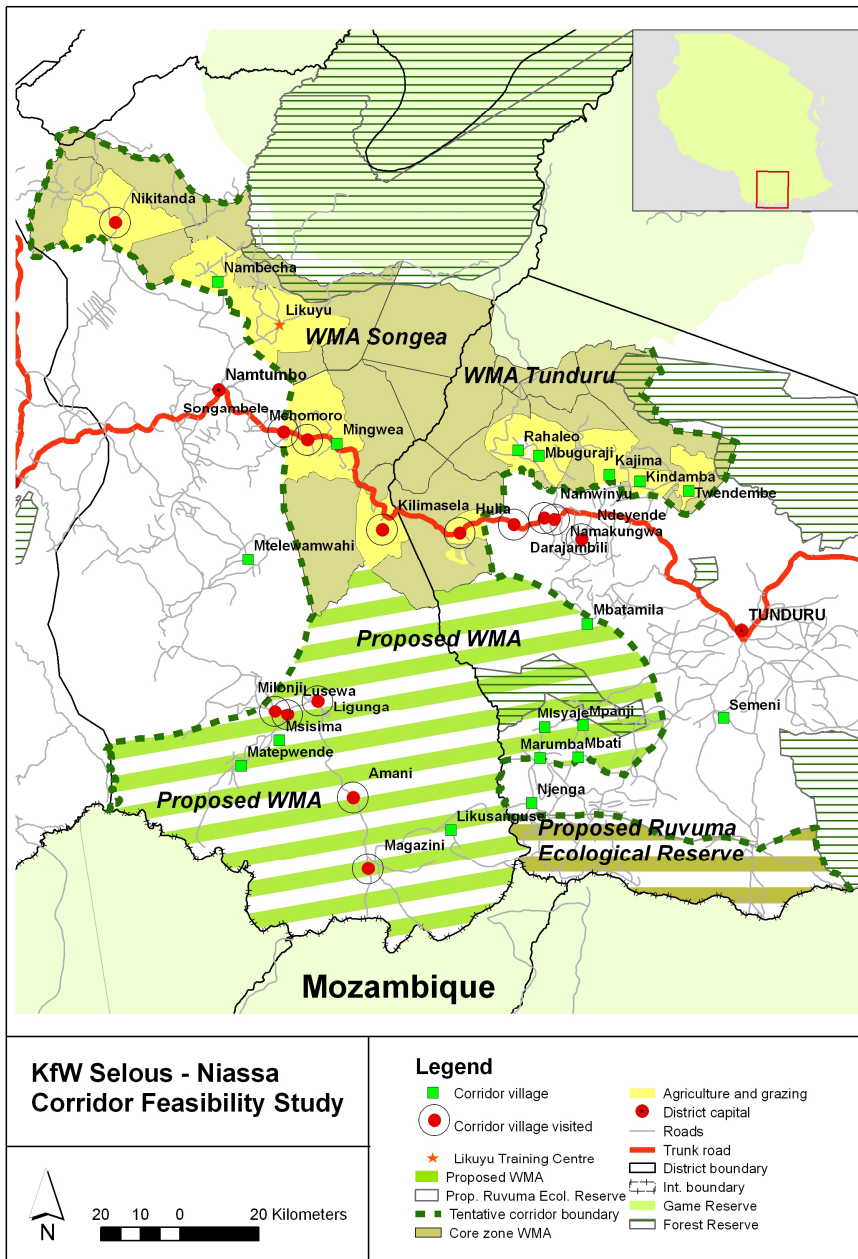
Niassa Game Reserve and Mozambique are beneficiaries of the Selous Corridor project as the natural resources will be part of a larger “landscape level” protected area system with expected global benefits in ecological viability.

Linkages with Mozambique have been developed at several levels:

- PA Levels. Following the first formal exchange in Songea there have been three follow up meetings; two have been in Niassa Game Reserve. There is now compatible radio contact.
- National Levels. The last meeting was at World Parks Congress in Durban (in September 2003) between Director Wildlife Mozambique; Director (Wildlife Conservation) Tanzania and Senior Field Staff.
- Development Level. The Mtwara Corridor has the Selous Niassa Conservation Corridor on its agenda in seeking cooperation and investment into the trans-boundary areas.
- Donor Levels. Project development agencies are in touch with co-finances on Mozambique side – e.g. Fauna Flora International (FFI) who will be funding Niassa Game Reserve, also using the title of Niassa – Selous Corridor.

Recommendation: The formal establishment of a Trans-boundary Management Committee is recommended, to be composed of representatives from the Line Ministries in charge of biodiversity conservation from both countries, representatives from the corresponding District Offices, the corridor WMAs, the Niassa administrators and Niassa leaseholder and other key stakeholders still to-be identified. Furthermore that the project provides the funding for periodic meetings and the production and dissemination of joint policies and management guidelines applying to the trans-boundary area. The total costs of this component are estimated at EUR 23,000.

Figure 2: Location of the Selous-Niassa Tran frontier Conservation Area
 (Source: Schuerholz and Bossen: Corridor Feasibility Study Report, 2005)



2.2.6 Forestry and Beekeeping Division and REDD+

The Tanzania Forestry and Beekeeping Division is a quasi independent self-financing institution reporting to the MoNRT. Revenues generated from forest management are retained except for a small portion returned to Treasury. The FBD is represented in the country's seven zones that are subdivided in 26 regions with a total of 120 districts. The FBD is responsible for the sustainable management and protection of (a) Protected forests, (b) Productive forests, and (c) plantation forests and the country's REDD+ Program.

Important facts related to Tanzania's Forestry Sector:

- Mainland Tanzania has a total forest area of 33.5 million hectares, covering 37.8% of the total land area:
 - 1.1 Mio ha mangrove
 - 0.4 Mio ha other forests
 - 32 Mio ha woodlands
- 29% of the forest area in Tanzania is categorized as protection forest (9.7 Mio ha (mostly catchment areas) of which 278 are „declared areas“.
- 14% are designated national parks.
- 23 Mio ha are designated Production Forests (306 declared areas).
- Forests contain high level of biodiversity qualifying the country to be amongst the 12 globally biodiversity richest countries.
- Forests contribute 2.6 to 3.4 % of Gross Domestic Product (GDP).
- Forests provide over 92 per cent of the energy resources.
- Forests are the major sources of fodder for livestock.
- Forest-based activities generate employment to about 800,000 people per year; half of them women.
- About 71% of the forest area in Tanzania is used for productive purposes.
- Forests are under enormous pressure from expansion of agricultural activities, livestock grazing, fires, charcoal burning and other human activities. Other causes of continuing deforestation are poverty, loss of traditional knowledge in forest management, population dynamics, and poor agricultural practices.
- The average rate of forest loss and destruction for the past twenty years is 92,200 ha per year (Source: FAO country report).
- Community forestry programmes in Tanzania play an increasingly significant role in counterbalancing natural forest losses.

A large part of non-gazetted forest land is not under any ownership or proper guidance, therefore, there is shifting cultivation and heavy pressure for conversion of forest land to other competing land uses, such as agriculture, livestock grazing, settlements and industrial development. Under the new Forestry Policy, this is the target area for converting into village land forest reserves.

REDD+ in Tanzania is coordinated through the National Steering Committee, a Technical Coordination Committee and a National REDD+ Task Force of which the MoNRT is represented. Supported by the Director of Environment (Chair), functioning directly under the office of the Vice President, the National Task Force on REDD+ was recently restructured and is now representative of more sectors that are relevant to coordinate REDD+ at a national level than before. Thematic working groups, such as one working on drivers of deforestation and forest degradation, report to the Task Force.

Tanzania recognizes the potential dangers as climate change may aggravate impacts of the high rates of deforestation, even though at the moment little is known about climate change's effect on forests and how this may impact on the livelihoods of the communities. The country is hence motivated to engage in REDD+ as one potential solution.

The Forest Policy of 1998, which was recently reviewed, seems conducive to REDD+, in large part due to the fact that it encourages community and private sector involvement in forest management through establishment of Village Land Forest Reserves, community forests and in Joint-Forest-Management arrangements where communities have user rights and management responsibilities. The purpose of these arrangements is to aid conservation of forests by reducing illegal use of the resources. In addition, the Forest Policy makes explicit reference to linkages with other sectors. Recognized linkages include agriculture, livestock, mining, energy, wildlife, beekeeping, environment and land

Key achievements of REDD+:

- NGOs becoming more active in REDD+ related matters (9 REDD pilots)
- Development of a REDD+ Strategy which has been a fairly participatory process
- Restructuring of the REDD+ Task Force which was originally comprised of only two sectors

Key bilateral donors to REDD+ and the Forest Sector are Norway and Finland, supported by others. There is a general feeling among donors that Tanzania's Draft REDD+ Strategy now in place has been developed through a fairly inclusive and consultative process and it has been well informed by the lesson from the nine REDD+ Pilot Projects currently being implemented in Tanzania. In addition, there appears to be sufficient high level political backing of REDD+ and awareness on REDD+ is definitely increasing, even though most of this is related to expected benefits of carbon funds flowing into rural areas.

Bilateral REDD+ Programmes funded mainly by Finland and Norway have also been critical in providing lessons learnt to Tanzania's REDD+ Programme. Examples of Support include:

- Readiness-Preparation Proposal and REDD+ Strategy Development Programme supported by Norwegian funds.
- Forest Resource Assessment supported by Finland through FAO.
- Direct support to REDD pilots across Tanzania.
- Support from Norway, a new faculty at Sokoine University of Agriculture of a Climate Change, Impact Adaptation and Mitigation Research Project– good for capacity building

Challenges related to REDD+:

- Growing desertification and deforestation (.2% per year).
- Serious illegal cutting.
- Encroachment and alienation for agriculture.
- Insufficient rangers to control and enforce.
- Serious illegal cutting.
- Encroachment and alienation for agriculture.
- Insufficient rangers to control and enforce.
- Need for development of systems and structures at the regional levels to deal with illegal trade in wood and non-wood products from forests. This also requires capacity building and networking among practitioners.

- Need to improve and promote public-private partnerships to implement the REDD+ strategy.
- Capacity building for a better understanding and appreciation of REDD+ on all administrative levels, Line agencies and communities involved in REDD+ issues.
- Need to support (and capacity development) the current „Participatory Forest Management Programme“.
- Forest inventory and survey needed to define forest boundaries on operational scale of 1:50 000 and as basis for carbon trade negotiations.
- Need to develop (participatory) a management plan for each designated Protection Forest and Community Forests (over 1000).
- Boundary demarcation needed for declared forests.
- Assessment of encroachment issue (quantitative and qualitative) cannot be done due to lack of staff and funding.
- Capacity development needs related to the promotion of eco-friendly income generating activities around forest areas while maintaining compliance with sustainable forest management principles.
- Capacity needs for monitoring REDD+ implementation, awareness on rights, impacts on policies and how to improve the continued flow of direct and co-benefits of managing forests under REDD+.

The DFB recognizes the need to develop the tools, technical and financial means to achieve REDD+ at various levels. This includes:

- *Managing for carbon sequestration and benefit sharing*: Need for capacity building and a system of transparent and equitable distribution of benefits along the carbon production chain
- *Legal framework*: Tanzania feels that it still needs to have a strengthened legal framework that is enforceable both at the national and regional levels to deal with illegal trade in forest products which is associated with “carbon leakage”

Before addressing its perspective on what REDD+ readiness constitutes, Tanzania has (rightly) two rather thought provoking questions according to the DFB:

- **Where are the markets for carbon?**
- **How to benefit from carbon sequestration?**

2.3 Staff levels and Training

2.3.1 Wildlife Division

The Wildlife Division does not sustain its own Human Resources Management Unit (HRM) which is integrated into the MoNRT central HRM Department responsible for all aspects of recruitment and training. Since budget constraints forced the Ministry to impose a general recruitment stop of all level personnel for the past 3 years, vacant positions have not been filled for three years. For WD staff by protected area Annex 4 refers.

Currently the Wildlife Division has a total staff of 1,139 (vs. 4588 required according to the WG Deputy Director), with management responsibilities for Game Reserves covering about 109,417 km, hunting control in Game Controlled Areas of about 55,565 km², and sustainable management wildlife in an extensive open area country-wide. Currently (applied to Game Reserves only), one game scout patrols 159.7 km² while the standard control area of a well equipped Ranger should not exceed 25 km².

The WD sustains 8 Anti-poaching Units with a combined total of 238 rangers (ideally 550 needed).

The Pasiansi Training Center (has a staff of 40, The Likuyo Sekamaganga Training Facility 11, and the Tourist Hunting and CITES Office of the Wildlife Division 14 (all under the umbrella of the WD). The Malihai Wildlife Clubs of Tanzania, also established under the umbrella of the WD have a total staff of 14.

Entry requirements of Junior Rangers are: (a) high school diploma and certificate in wildlife management or related field, or (b) high school diploma and completed military service. After recruitment Junior Rangers are sent for a one-year Certificate course in wildlife management to Pasiansi or Mweka. Corresponding training costs are carried by the WD.

Minimum entry requirements of upper management personnel are a diploma and/or a BSc in wildlife management (or related field), or in the area of expertise as per job description requirements. Additional expertise required is provided in-service or through learning-by-doing. Furthermore, specialty short courses are provided as needed, mostly offered by Mweka. All additional and advanced training is financed by the WD.

The internal "Scoping Vision" analysis report of the WD (2011) has elaborated following recommendations:

"...In addition to long-term training needs of at least 60 senior staff the organization is required to conduct short term training to:

- *Director/Managers for at least one short course/seminar/workshop as needs arise outside the country, at least once every year.*
- *At least 50 Officers (Park Warden, Ecologists, and Tourism promotion officers, Engineers, Planning Officers, Administrative and Personnel Officers, Accountants, Auditors, Procurement Officers) be supported annually to attend short courses/seminars/workshops/meetings. Additionally, at least another 100 officers be supported to attend short courses/workshops/seminars locally.*
- *In-house training to-be organized for Park Rangers, mainly in form of refresher courses, to address special training needs. Two training sessions for about 50 rangers to-be organized per year.*
- *Office/Park attendants to-be trained through in-house staff to-be organized in collaboration with institutions such as NIP, VETA etc. One in house training event organized after every 2 years.*

A list of potential training modules has to be identified the Human Resources Office for implementation." (Wildlife Division, 2011).

At current the WD is not in a position to finance the specified training recommendations. The total cost related to the recommended training package would amount US\$ 250,000). At current approximately US\$ 120,000 are allocated annually for training.

In general:

- The staff turn-over rate at the WD is difficult to estimate because of all current openings; total personnel needs at current approximately 2000 (80% at ranger level).
- The Wildlife Division is significantly under-financed, under-staffed and under-equipped; poorly motivated, partly corrupt; no incentives for personnel, no career development opportunities.

- Current training needs to upgrade personnel is estimated at 400/year (340 frontline staff, 60 upper management personnel).
- 90% of rangers recruited from National Service (advantage: no additional training need for boot camp, weaponry and/or team development).
- Upper PA and Headquarter management personnel hired from Universities (graduates) or the private sector. Successful applicants have to meet qualifications specified in advertised job announcements.

Should the Wildlife Division be converted into a parastatal agency, the training needs of the new organization will be enormous. Special knowledge and performance skills mostly for HQ staff are required in the following areas specified by the WD:

- Good Governance
- Human resources management
- Accounting and financing
- Financial management
- Recruitment
- Procurement
- Business planning
- Wildlife development and management
- International treaties
- Wildlife utilization
- Counselling
- REDD+
- Tourism Development
- Public relations and community work
- Planning and cooperative management
- Management- and Business Plans for PAs
- Research and monitoring
- GIS-based data management and retrieval
- Trophy hunting
- Policy and legal framework

Recognized training gaps at the ranger and senior staff PA level:

- Tourism marketing
- Business planning and administration
- Social skills
- Policies and laws (legal framework)
- CITES
- Negotiation skills
- Conflict resolution
- Record keeping and data processing

2.3.2 Wildlife Management Areas

Training related to Wildlife Management Areas is aimed at community leaders and scouts. To date all training has been provided by the Likuyu Sekamaganga Community Based Conservation Training Center, to a lesser extent by the Pasiansi Training Center. Entry requirements of scouts is literacy and proven field skills. Since community leaders are generally democratically elected for a limited term, the turn-over rate is high requiring training of new community leaders after each term.

Estimated WMA Training needs at present:

- 3500 scouts refresher course
- 1000 scouts base training
- 600 community leaders base training

Challenges:

- The greatest challenge is the lack of funding for trainees
- The CBCTC training facility needs upgrading and expansion

Recommendations

- Updating of training modules for scouts and community leaders to meet new challenges (especially with regards to Tanzania's REDD+ strategy and conservation issues related to neighbouring PAs).
- Improve cooperation with front-line staff from respective PAs for joint law enforcement, environmental monitoring etc.
- Formalize cooperation agreements between WMA village scouts and neighbouring protected areas.
- Use of PA rangers for training of village scouts.
- Create mobile training unit and state-of-the art training package for on-site training of Village Scouts and CBO leaders.

2.3.3 Tanzania National Parks

Tanzania National Parks has a staff of 2159 (i.e. 1279 rangers, 118 park wardens, 762 support staff); Annex 5 provides a detailed break-down of TANAPA personnel by protected area.

- 122 staff located at well-equipped and maintained HQ Arusha.
- 80% of frontline staff recruited from National Service; after recruitment TANAPA sends them to Pasiansi for 1 year certificate course; some recruits pay for their own education at Pasiansi or Mweka and then apply for a job.

Entry requirements of Junior Rangers and upper management personnel are the same as the entry standards described of the WD. The cost of all base training after recruitment and follow-up specialty training is covered by TANAPA.

At current 30-50 rangers/a are trained at Pasiansi or Mweka; TANAPA pays for tuition and the salaries of trainees.

In-service training related to special skills required and refresher course packages are extended to about 80 rangers/year.

Priority training needs identified for frontline personnel by TANAPA:

Field skills

Weaponry

Rescue

Investigation, intelligence, and prosecution

Exchange Programs: Ranger training outside the country has been used in the past as performance incentive; every other year a minimum of four rangers had been sent to Botswana or Kenya for 3-4 weeks (standards of both countries highly regarded by TANAPA). The program is currently put on hold for lack of funds.

TANAPA provides annual financial contribution to Mweka and Pasiansi to cover part of the institutions' operational cost.

An Internal TANAPA Memo on training needs and gaps recommends:

- general short-term training to 64 upper management staff/a;
- short-term local training on specified subjects to 100 mid- and upper management staff/a, and
- in- house training to 100 frontline personnel/a.

However due to financial constraints TANAPA is unable to follow up on its own recommendations at this point in time.

Recommendations (identified gaps in knowledge- and performance-based skills):

- To provide leadership training to upper PA management personnel.
- To provide training to frontline staff in the areas of communication and dealing with communities located in the respective support zones of NPs.
- To train frontline staff and village scouts of WMAs and support zones affiliated with respective PA for implementation of joint law-enforcement and wildlife management.

2.3.4 Ngorongoro Conservation Area Authority

The NCAA has 500 employees of whom 184 work exclusively with the Maasai living within the NCA. The NCAA expressed the urgent need of 300 additional rangers in order to deal with mounting problems related to growing Maasai populations and livestock herds in the NCA. The NCA enjoys a low staff turn-over rate (approx. 1-8 persons/a resulting from retirement and/or sickness/death.

The staff entry requirements and recruitment procedures of the NCAA are standardized and the same as for TANAPA and the Wildlife Division. Rangers are hired mostly from the National Service. On recruitment they are sent to Pasiansi or Mweka on a certificate course. The NCAA pays for all training of its staff. Just like TANAPA and the WD, the NCAA provides an annual financial contribution to both, Pasiansi and Mweka.

Training needs identified quoted by the NCAA

- Ideally 20-30 rangers/year to-be selected for refresher- and special skill courses.
- Ideally 20 senior management staff/annually to-be selected for specialty short-courses.
- Need to recruit 200-300 additional rangers requiring Certificate base course training in wildlife management with additional training, people management, boundary disputes, communication skills and tourism.

2.3.5 Selous-Niassa Ecological Corridor TFCA

Most of the current training needs of community leaders and scouts of the new WMAs affiliated with the corridor, as well as ranger training related to the mobile anti-poaching unit and expanded/new ranger stations appear to be financed by the on-going KfW-funded Corridor Development Project and the WD.

It is estimated that in addition approximately 300 village scouts of the 5 older WMAs of the corridor are in need of a refresher course and at least 80 community leaders and CBO staff in need of a base course as offered by the CBCTC.

It appears that there may also be a need for specialty training of WD rangers and district level staff operating in the corridor focusing on TFCA-related management issues,

especially with regards to policy design, communication and joint law enforcement with the neighbouring Niassa personnel.

Recommended training needs in addition to training covered by the KfW funded Project:

- 30 rangers of the new anti-poaching unit established in the corridor.
- 8 frontline staff in need of base Certificate long-course At Pasiansi.
- Training of 6 professionals in land use planning at the District Land Office Namtumbo
- 350 scouts base training
- 200 scouts refresher training
- 120 community leaders and CBO executives basic training module

2.3.6 Forestry and Beekeeping Division and REDD+

The general recruitment stop imposed by the MoNRT on its Divisions for the past three years continues to have significant impacts on the FBD and the on-going REDD+ Program (Mbwambo, pers. Comm.). According to Mr. Mbwambo gaps are most severe at the frontline personnel group, significantly affecting the ecological integrity of Protected Forests and declared Forests in absence of law enforcement.

Recognized Priority Training Needs of the FBD (are enormous!):

- Training on all REDD+ issues to-be provided on all levels of the DFB to:
 - **An estimated 500 mid-and upper level staff in need of short-term specialty training.**
 - **And knowledge training to 1500 frontline staff.**
- GIS based data processing related to forest inventories, boundaries, communities dependent on forests etc. requiring huge effort and funds.
- Training of village representatives in carbon issues.
- Community training on sustainable forest management, participatory management plans etc.
- Specialty short-term training on REDD+ directly affecting and benefiting communities to be delivered to foresters and forest rangers working with protection forests and communities (**estimated 800 Rangers and 10, 000 community representatives**);

A much needed capacity building process related to REDD+ is currently starting in Tanzania but mainly in the technical cadres in government; much less among communities and supporting NGO network involved in the Community Based and Joint Forest Management Programme.

2.4 Conservation- Related Training Facilities

This Chapter deals with Tanzania's training facilities and programs focused on the education and training of personnel managing the country's protected area system, affiliated support zones and WMAs.

Universities

General Tertiary Education (Knowledge-based):

- Universities and Colleges offering BSc and MSc Programs (catering *inter alia* to upper- and middle management personnel and administrative staff of PAs).

African College of Wildlife

Offering curricula aimed at PA middle-and upper management personnel (demand and performance-based):

- Certificate- and Diploma degrees in wildlife- and conservation management, tourism management etc.

Pasiansi Wildlife Training Institute

Special Training Facility offering country-wide training for Junior and Senior Rangers of Pas and WMAs

- Certificate courses and short-term custom-tailored modules and seminars.

Likuyo Sekamaganga Community-based Conservation Training Center

Offering country-wide training to Village Scouts and Community- and CBO Leaders of Wildlife Management Areas.

2.4.1 Universities (Tertiary Education)

Tanzania's agencies entrusted with the stewardship for its Protected Area System and biodiversity conservation can freely draw on graduates from several local Universities to satisfy the demand for upper management- and administrative personnel. They can draw on University graduates with a Major in natural resource management, biology, forestry, agriculture, livestock, veterinary, law, business administration, and numerous other areas related to conservation and natural resource management and beyond.

In order to avoid any misconception regarding academic qualifications required by PA upper management personnel, it is emphasized that although a BSc degree obtained through academic education should remain a standard entry requirement for employment with PA Agencies, there is no need for Academicians to manage protected areas. To the contrary, follow-up training and skill development should be performance and demand oriented, preferably obtained through in-service training.

The following five Key Universities of Tanzania offer BSc-, and MSc degrees in one or more of the fields needed to supply the diverse demand of the country's conservation agencies in need of well qualified upper management and administration personnel.

- University Dar es Salaam
- University Morogoro Sokoine University of Agriculture
- University Morogovo (agriculture, natural resources and wildlife)
- University Dodoma (conservation faculty)
- University of Tanzania: distance education very popular

All five Universities offer comprehensive annual calendars with detailed curricula and syllabi online.

It is noteworthy that the Sokoine University is the only educational facility in the country offering a degree related to climate change and REDD+. A special faculty has been established at the University through bilateral Aid of NORAD.

Since upper and middle management positions primarily focus on people management, the most important skills affiliated with those positions are:

- **good leadership,**
- **good communication, and**
- **conflict management,**

Best to be delivered in form of workshops and seminars as needed. The curricula offered by Tanzania's Universities related to the personnel needs of the country's conservation agencies are sufficiently broad and of sound quality to meet the demand in terms of quantity and quality.

2.4.2 C African Wildlife College Mweka

Detailed information on Curricula and Programs, well described by the Syllabi of the African Wildlife College, are available from the continuously updated AWCM Website with a link to its very comprehensive Prospectus. A SWOT Analysis of the AWCM is provided by Annex 6.

Uniqueness and Specialty of AWCM:

All training is strictly field-oriented and practical. Certificate- and long-course students spend first 2 months in the field under supervision of a College Instructor and designated professional from the respective PA where the field training takes place being exposed to all aspects of PA management, followed by 2 months class work, exams, followed again by 2 months field work to apply what has been learned, then either final exams for Certificate course or continuing alternating classroom-field studies for Diploma degree.

Facts related to the AWCM:

- College established in 1963 as Parastatal under umbrella of MoNRT.
- Since its establishment College has trained 4,600 students (long-courses).
- AWCM with excellent access via hard top road from Arusha (60km, international airport 35 km).
- Located at foothills of Kilimanjaro and at border of Kilimanjaro NP neighbouring the Mweka community.
- Combination of permanent and contracted staff; also specialists seconded by TANAPA.
- 80 total employees (30 permanent lecturers; 50 administrative and support staff).
- Contracted lecturers as needed; specialists seconded by TANAPA and the Wildlife Division as needed.
- Student-Lecturer ratio of 15 to 1.
- All permanent lecturers have MS degree; 8 in process of finishing their PhD (mostly abroad: UK, Holland, USA, Canada, and Norway).
- Salaries of all AWCM personnel paid by Government since 2002.
- High stability in staff, NO TURN-OVER IN PERSONNEL due to excellent framework conditions.

- Staff highly motivated, well educated, decent wages and attractive fringe benefits.
- Current AWCM budget 3.4 Mio USD. Most of budget from student tuition with contributions from sister organizations TANAPA and NCAA; also assistance from Government through „Capital Development Fund“ (aimed at infrastructure development of College).
- Current capacity of 500 long-course students/a; College working at capacity level.
- Good collaboration with NGOs and Universities abroad.
- MoUs with Universities for exchange programs (Manchester Metropolitan Univ., Alvdalen Univ. of Sweden, Headmasters Univ. UK, also MoUs with local Universities and Colleges).
- 80% of students are Tanzanian nationals, others from Kenya, Mozambique, Sudan, Zambia, Gambia, Japan and Canada.
- Excellent field training facilities using major National Parks and Game Reserves for field training, including Mt. Kilimanjaro NP and Serengeti NP.
- Plans by Ministry to double capacity of the College to meet increasing demand (1000 students by 2015). Current consultancy developing business plan for additional infrastructure needs (i.e., classrooms, dorms and staff quarters, new septic system etc.).
- Currently no scholarships provided by donors except for the African Wildlife Foundation with 5 scholarships/a; Canada provides one/a.
- (EU bursary sponsorship program of 100 students/a through SADC and Mc Arthur Foundation sponsorship of 30 scholarships/a program both expired).
- AWCM receives large number of applications per year from all over Africa, all asking for scholarships. Facit: large demand, excellent training facility, but no scholarships.

AWCM facilities and infrastructure

- Up-to date training facilities of good standards.
- New training block (financed by EU) consisting of classrooms, academic staff offices, and 2 fully equipped computer laboratories with 47 computers for training and student use.
- Full-time internet service provided by Campus-owned provider.
- Students can register for unlimited internet access on campus against fee.
- Large and well stocked library (capacity for 90 readers) with separate DVD and CD room for students. Campus library also used by off-campus persons and researchers with library cards. Campus library also manages community library of neighbouring Mweka.
- Small biological well-equipped laboratory.
- 8 well maintained and equipped class rooms with capacity of 50 to 100 students each (all classrooms have LCD projector).
- Well maintained and equipped dorms (48 single rooms with en-suite bathroom, double rooms, 3-bed rooms and 4-bed rooms adjusted to financial means of students and catering to gender demands).
- Recently build and refurbished student hostel with accommodation for 450 students on non-shared and shared basis.
- Students who cannot be accommodated on campus have own secure accommodation in town Moshi (12 km from campus) or at Mweka and Sungu villages adjacent to College.
- 90% of staff with houses and accommodation on campus.
- Large Auditorium Maximum (seating capacity of 500 persons).
- Small but well-stocked armoury.
- Small infirmary and dispensary.

- Two cafeterias (out-sourced) catering to student demands (kosher foods, vegetarian etc.).
- Large and diversified recreation and sport facilities.
- Central laundry facilities for student self-service or done by Campus personnel against fee.
- Central communication and printing system.
- Mechanic shop with 8 mechanics and drivers for vehicle-park with a field transport capacity of 300 students at any given time.
- Complete camping equipment including mobile field kitchen for 80 students.
- College is fully equipped for field work; (students have to wear uniforms while in the field).
- Field-work in close cooperation with NP staff and rangers;
- Selous used for hands-on hunting training, animal dressing, trophy handling etc.
- Generous Campus lay-out, secure gated facility, ample parking area.
- **Security, cafeterias and maintenance work out-sourced** (providing additional job opportunities to neighbouring communities).

Training-related Facts

- AWCN is registered with National Council for Technical Education, eliminating accreditation problems in Tanzania.
- Recognized Center of Excellence by the East African Community and the Southern African Community (SADC), eliminating accreditation problems in all member states.
- College mandated by Government to provide demand articulated training, research and consulting services in African wildlife conservation and management.

Degree Programs offered based on a 2002 training needs assessment

No training offered yet related to climate change and/or REDD + issues at the College

- Basic Certificate in wildlife and tourism management (6 months) aimed at scouts and tour guides.
- Technician Certificate in Tourism Hunting (1 year) aimed at professional hunters.
- Technician Certificate in Wildlife Management (1 Year).
- Technician Certificate in Wildlife Tourism (1 year).
- Ordinary Diploma in Wildlife Management (2 years).
- Ordinary Diploma in Wildlife Tourism (2 years).
- Bachelor in Wildlife Management (3 years).
- Bachelor in Wildlife Tourism (3 years).
- Postgraduate traditional Diploma in Wildlife Management (1 year) (mostly for PA management professionals to upgrade).
- Postgraduate Diploma in Tourism Planning and Management (1 year) for students with bachelor degree in related field.
- Postgraduate Diploma in wetland management (1 year) for PA officers working on wetland management.

Long-term courses are structured in modular and semester format. Students on short-courses can attend ongoing modules or tailor-made courses. Modular courses vary from one to four weeks.

The College also offers custom-tailored short courses on campus or a combination of on-campus and in-the field courses. Off campus courses are also known as „outreach programs“. On-campus and on-site delivery are handled by a mobile training unit assembled *ad hoc* in accordance with the training requirements by the client. Short-term training options tailored to client demand include *inter alia* CBO management and business development, financing and financial management, service personnel for tour operators, tourist guides etc. The duration, purpose and learning outcomes of tailor-made courses depend on customer performance needs. In the past the College has also catered to Mozambique and Angola with College lecturers travelling to both countries for on-site specialty training delivery.

Field training

- Use of world-famous Serengeti NP, Kilimanjaro NP, NCAA, Selous (hunting related training) for field training.
- The College manages the Kwakuchinja Wildlife Study Area, used as a prime field laboratory and training ground.

2.4.3 Pasiansi Wildlife Training Institute

Time constraints did not permit the author to visit the Pasiansi Wildlife Management Training Institute. Therefore no on-site assessment of the facility, staff and students can be provided. For detailed information on the curriculum and training programs offered by the PWTI it is referred to the Institute's Website with links to the annual calendar, information on admission requirements and application procedure, tuition etc. The following highlights some of the information of the PWTI as gathered from the Wildlife Division, the African College of Wildlife Management and the Pasiansi Website.

The PWTI was established in 1966 as a game scouts training centre aimed at providing training services to game scouts of Tanzania's Game Department. Up to mid 1970's, the basic role of game scouts was to control problem animals and engage in anti poaching activities. After a major curriculum review in 1987, the Institute changed its name to „Pasiansi Wildlife Training Institute“. During the review, skills, knowledge and attitudes necessary for game scouts to perform their tasks in the field effectively were identified and incorporated into the updated curricula. The academic capacity of the Institute was improved by recruiting graduates from universities who were later trained in teaching methodologies. The PWTI is financially supported by the WD, TANAPA, and NCAA with budget aid from the MoNRT. It is operated under the tutelage of the WD.

The PWTI offers a one-year modular course and short courses to junior rangers and scouts (operational level personnel) from Tanzania's Wildlife Division, TANAPA, NCAA, District Councils, Village Governments, Private companies and individuals, and other agencies dealing in conservation of natural resources. Tuition and all related training costs are covered the employers or students. Periodic curriculum reviews are undertaken to adjust to skills, knowledge and attitudes for game scouts and rangers in accordance with new challenges and demands as required by the clients. The PWTI has a permanent staff of 40, with wages paid by the Ministry of Natural Resources and Tourism.

Curriculum and Programs offered (see Website Pasiansi Wildlife Institute):

- Technician Certificate in Wildlife Management (one year course)
- Modules towards Certificate in Wildlife Management including:
 - Wildlife Law Enforcement
 - Statistics

Range Management
Botany
Invertebrate Zoology
Herpetology and Ichthyology
Ornithology
Mammology
Wildlife Management and Geography
Basic Military Training Level II (although most trainees have already completed their military service on admission)
Wildlife Conservation Education and Basics of Administration
Basic Tourism, Communication Skills and First Aid

- Basic Technician Certificate in Wildlife Management (1 year course)
- Modules towards Technician Certificate in Wildlife Management entail the same subjects as for previous but all “basic” (introduction to..)
- Short Courses (1 month)
 - tailor-made short course in Basics of Wildlife Management intended for village game scouts.
- Short Courses (2 months)
 - tailor-made short course in Basics of Wildlife Management intended for village game scouts.
- Short Courses (3 months)
- short course in Basics of Wildlife Management intended for village game scouts. The subjects also offered to ordinary level secondary school leavers who did not pass in either biology or geography or both but scored Division IV of an aggregate of 28 points.

2.4.4 Likuyu Community Based Conservation Training Center

The Likuyu Sekamaganga Community Based Conservation Training Center is a Government Institution reporting to the Wildlife Division of the Ministry of Natural Resources and Tourism. The Center was developed jointly by the Ministry of Natural Resources and Tourism, Selous Game Reserve and the Selous Conservation Programme/GTZ in 1995, and renovated with GTZ funding in 1996. The Center is located in Likuyu, Namtumbo District. The Center offers training packages for village game scouts and village leaders and executives of Community Based Organizations, enabling the trainees to effectively participate in CB conservation and sustainable land and resource use management. Its strategic location in the heart of the Songea District, bordering the Selous Wildlife Reserve offers ideal framework conditions for scout training in the field and for community executives to learn from the WMA experience of neighbouring villages.

The CBCTC currently concentrates on two basic training packages, (a) a 6 weeks village scout training program with a capacity of 40 participants per event, and (b) a two weeks course for village executives with a maximum of 30 participants. The course costs (6 weeks all inclusive) per scout are about EUR 300 and for the 2 weeks leadership training about EUR 140/person. Most trainees are either sponsored by donors or by the respective District. The part-time instructors (5 persons) are supplied by the District, the Wildlife Division and the Selous Game Reserve, and the 4 full-time instructors are supported by the Wildlife Division in Dar es Salaam that also covers shortfalls in the operational budget of the Center.

The CBCTC has been operating at between 60 and 90% of its capacity since its establishment in 1996. Since then it has trained 3,349 scouts and community leaders (Annex 7).. The operational costs of the Center amount to approximately 11,000 EUR/a per year of which approximately half comes from The Wildlife Division and half from revenues generated by the Training Center (i.e., from donors).

Infrastructure Assessment of the CBCTC: In absence of proper dorms one classroom that actually would be needed for teaching has already been converted into a communal bedroom accommodating 15 beds within one single room. All other facilities such as the office complex, classrooms, kitchen and staff quarters are also sub-standard. Although the Center is linked via VHF to the Selous radio-communication system, the radio is not fully operational due to its unreliable solar power supply that urgently needs rehabilitation and expansion. The Center has no electricity. The only two vehicles owned by the Center were purchased by GTZ in 1992 and urgently need to be replaced. There are no means of transport for scouts to be trained in the field and for community leaders to be taken to neighbouring villages for training.

Recommendation: In light of the growing training needs resulting from corridor establishment and the general training demand related to WMAs in the country it is recommended to expand the Center's capacity from 30 to 60 trainees, to build 6 new staff quarters, one small office complex, 2 dorms, a social lounge and to upgrade the kitchen facilities. Furthermore, to supply a generator and new vehicles, including a mini-bus and a 5 ton truck for training purposes.

The estimated total investment costs for upgrading the CBCTC is EUR 500,000 which would directly benefit the Selous-Niassa corridor villages as key target group of the KfW-supported Corridor TFCA establishment and the Wildlife Division.

3 GAP ANALYSIS

3.1 Training Needs

The following summarized training needs of protected area personnel, personnel related to Wildlife Management Areas, the Selous-Niassa Ecological Corridor TFCA, and training needs associated with Tanzania's REDD+ Program constitutes a very conservative estimate which does not even include the communities associated with National Park support zones. The results indicate that the greatest training demand is related to frontline staff of protected areas, WMAs and an enormous need of community leaders and Village Scouts related to the Forestry Sector.

In this context it is emphasized that forests outside the country's designated protected area system (IUCN categories 2-3) play a vital role for biodiversity conservation supporting some of the highest species diversity and highest level of endemism in the country. At the same time the same forests are of vital importance to the livelihood of the majority of Tanzania's people by supplying their water and constituting the country's major source of fuel.

On-going deforestation throughout the country at an alarming rate of close to 2% annually continues to threaten conservation efforts and contributing to increasing ecosystem fragmentation already threatening the ecological integrity of large parts of the country. It is a known fact that un-checked ecosystem fragmentation will eventually convert protected areas into islands with all the dire consequences of well documented insular biogeography.

This attests to the critical importance of programs to be aimed especially at awareness building of people depending forests for their livelihood, and on country-wide programs aimed at sustainable management of all designated production forests, and, most important, community forests and cooperatively managed areas. Against this background the very high training needs within the framework of REDD+ cannot be emphasized enough.

It is noteworthy that to date no special training is available at any of the country's training facilities related to climate change issues and/or REDD+ Programs except for the Sokoine University. To include issues related to REDD+ and climate change into training material and curricula is a Must for AWCM, PWTI, CBCTC. Related training would be of particular importance and relevance to frontline personnel of protected areas dealing with communities of support zones and Wildlife Management Areas. Table 1 summarizes the quantitative training needs estimates as assessed by this country-wide survey. The estimates are mostly based on the results of discussions with Key persons from the institutions assessed and on professional judgment.

Table 1: Summary of Estimated Training Needs Related to Biodiversity Conservation

| Number of Trainees | Position of Trainee | Refresher course | Base course | Annual in-service 2 weeks (5*) | Certificate course one year | Diploma course two years | Short-term specialty course |
|--|----------------------------|------------------|-------------|--------------------------------|-----------------------------|--------------------------|-----------------------------|
| Protected Area Personnel (TANAPA, Ngorongoro and WD combined) | | | | | | | |
| 184 at current | Mid- and Upper Management | | | | | | x |
| 640 at current | Frontline Personnel (1*) | | | | x | | |
| 60 annually | Frontline Personnel | | | | x | | |
| 125 annually | Frontline Personnel | x | | | | | x |
| Selous-Niassa Corridor Training Needs Estimate | | | | | | | |
| 30 at current | Anti-Poaching Rangers | | x | | | | x |
| 120 at current | Community WMA Leaders (2*) | | x | | | | |
| 350 at current | WMA Village Scouts | | x | | | | |
| 200 annually | WMA Village Scouts | x | | | | | |
| 8 at current | Frontline Personnel | | | | x | | |
| 6 at current | Planners Namtumbo (3*) | | | | | | x |
| Wildlife Management Areas | | | | | | | |
| 600 annually | Community WMA Leaders | | x | | | | |
| 3000 annually | WMA Village Scouts | x | | | | | |
| 1000 currently | WMA Village Scouts | | x | | | | |
| Forestry Division REDD+ Training Needs | | | | | | | |
| 500 currently | Upper Management and HQ | | | | | | x |
| 800 currently | Foresters and Scouts | | | | | | x |
| 10,000 currently | Comm. Leaders and CBOs | | | | | | x |
| 40,000 currently | Village Scouts | | | | | | x |
| 1* Junior and Senior Rangers | | | | | | | |
| 2* Base Training as offered by Likuyo Training Center | | | | | | | |
| 3* Planning Section of the Namtumbo District Office | | | | | | | |

3.2 Knowledge and skills required

The most significant gap in knowledge and skills related to protected areas and biodiversity conservation at large relates to sustainable forest management of Wildlife Management Areas, Protected Forests, designated Production Forests and Woodlands, considering that only 14% of the country's forest ecosystems are protected by National Parks. 29% of the forest ecosystems constitute designated Protection Forest (9.7 Mio ha mostly catchment areas) of which 278 are „declared areas“that in reality enjoy little or no special protection (Mbwambo, pers. comm.). Most critical is the lack of sustainable management of the 23 Mio ha designated Production Forests (306 declared areas) and the 32 Mio ha of „Woodlands“that support most of Tanzania's population and wildlife. Lack of knowledge on how to manage these vast areas for sustainability compatible with biodiversity conservation is a monumental task to be tackled through the REDD+ Program.

Knowledge and Skill requirements related to the country's protected area system are actually mostly associated with the areas outside the PA boundaries: **the Wildlife Management Areas and Support Zones affiliated with protected areas**. Recognized gaps in knowledge and skills of PA personnel relate primarily to communication, how to deal with PA neighbours, knowledge and understanding of livelihood questions of PA neighbours, and awareness and appreciation of the need for CBNRM measures.

It is suggested that the corresponding knowledge and skill transfer may best be achieved through in-service and on-site specialty training that also should involve related CBOs and

community scouts in order to achieve a more effective cooperation in conservation efforts, a better understanding of community needs, and creating much desired synergies.

Knowledge and Skill requirements related to WMAs and PA- support zone communities should focus on responsible forest stewardship and conservation management as related to the ambitious goals of the extended REDD+ Programs. Major training emphasis and knowledge transfer has to be placed on CBNRM measures compatible with biodiversity conservation.

The training facilities of the Likuyo Community Training Center and Pasiansi appear to be the most suitable to address this challenge as it relates to protected areas and WMAs. Corresponding training and knowledge transfer should make provisions for mobile training units to be used for on-site training and provisions for on „campus“ training delivery.

In summary, the general assessment of training needs related to protected areas in Tanzania has shown that there is an enormous quantitative demand for training professional and frontline staff of protected areas, CBOs, Community Scouts etc. The assessment has also shown that good quality training facilities with sufficient infrastructure catering to all four levels and target groups in need of conservation related training exist. The results of the training needs assessment also shows that curricula and training modules addressing all training needs of PA and conservation management are either available or being adjusted to arising needs (except for REDD+ related training needs and programs).

By far the most critical gap, however, is the lack of funding to meet the enormous demand for training in the country. A Government in continuing need of direct budget aid to-be supplied by international donors, and a Government with priority needs aimed at poverty alleviation, health and education, simply will not be able to free-up the funds needed to meet the country's demand for conservation training.

It therefore is evident that the majority of funds for Tanzania's extremely high training demand related to PA personnel and support zones has to be found from sources other than Government; if not, the training needs cannot be met.

4 SUMMARY AND RECOMMENDATIONS

Given that funding of fellowships, bursaries, short-term group training associated with protected areas and their support zones, TFCAs and ecological corridors, is the most serious and well recognized bottleneck related to training in Tanzania, it appears prudent to concentrate efforts on this issue. The demand for fellowships and bursaries proves to be most pronounced for mid-and upper management staff of protected areas requiring long-course training leading to Certificates and Diploma degree. The current survey results substantiate the increasing difficulties Colleges are facing in drawing trainees from SADC member states to the two regional Wildlife Colleges Mweka and SAWC, which may be directly linked to the shortage of donor-funded fellowships and bursaries and the financial inability of member states to send their staff to regional training centers.

Tanzania happens to be in the fortunate position to sustain high quality, well equipped and well-staffed training facilities catering to all levels of training needs and target groups of PA- and CBO-related personnel. At the same time, however, lack of funding in Tanzania is the main barrier to using the existing facilities and programs offered to the fullest extent. It is not the lack of suitable curricula and short-courses which in Tanzania are either custom-tailored to client demand or adjusted to arising needs on a short notice.

Establishment of a Conservation Training Endowment Fund

With due consideration of cost-effectiveness and training-related priority needs in the SADC Region the establishment of a “Conservation Training Endowment Fund” under the umbrella of the SADC Secretariat may be a viable option worthwhile pursuing. Such Endowment Fund could be structured and managed similarly to the Global Environmental Facility (GEF) Fund, although the latter constitutes a “Sinking Fund” that has to be replenished periodically. The great advantage of Endowment Funds is that the invested capital is not touched and that the interest generated is sustainable.

If an Endowment Fund as proposed proves to be a viable option the Fund should be accessible to all SADC member states for PA- related training. Member states could apply fellowships awarded to worthy candidates to be trained at one of the regional training facilities; alternatively, funds could be provided for in-service training, short courses or any other well justified and documented training need.

Provided the proposed Endowment Fund proves to be a viable option, the application by SADC member states to access the Fund should be kept simple, transparent and well regulated. It may also be considered to allocate funds by quota to member states.

The results of the training needs assessment appear to suggest that at least part of the available KfW grant should be used for urgently needed upgrading of those Key training facilities in the SADC Region that do not require major investments but where small investments would result in a dramatic improvement of training delivery, especially training of PA frontline personnel currently experiencing the greatest training gap. In Tanzania,

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such a Centre worth supporting is the CBCTC which plays a Key role as the most important training facility for CBOs and Village Scouts, and a Key role for the training of WMA personnel of the KfW-financed Selous-Niassa Ecological Corridor TFCA Project. The total cost required to bring the facility up to standard is an estimated EUR 600,000.

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