

**Tanzania: Game Management in the Selous Game Reserve and
Resource Conservation in Lushoto District**

Ex-post evaluation

OECD sector	1a 41020 Biosphere protection 1b 41030 Bio-diversity 2a 31161 Food crop production 2b 41030 Bio-diversity	
BMZ project ID	1a TC: Selous Game Management 2002.2470.9 (and several prior phases) 1b FC: Resource Conservation and Buffer Zone Development Phase I 1994 65 352 2a TC: Appropriate Farming in Usambara (Lushoto) 1996.2117.8 (and several prior phases) 2b FC: Resource Conservation and Buffer Zone Development Phase II 1995 65 763	
Project-executing agency	1&2b Ministry of Natural Resources and Tourism 2a District Administration, Lushoto District	
Consultant		
Year of ex-post evaluation	2005	
	Project appraisal (planned)	Ex-post evaluation (actual)
Start of implementation	1a TC 87 1b FC Aug. 94 2a TC 81 2b FC Aug. 94	1a TC Oct. 87 1b FC May 95 2a TC July 81 2b FC June 96
Period of implementation	1a 16.25 years 1b 36 months 2a 19 years 2b 36 months	1a 16.25 years 1b 86 months 2a 19 years 2b 60 months
Total costs	1a EUR 23.756 million 1b n.a. ¹⁾ 2a EUR 14.706 million 2b n.a. ¹⁾	1a EUR 23.572 million 1b n.a. ¹⁾ 2a EUR 14.987 million 2b n.a. ¹⁾
Counterpart contribution	1a EUR 10.500 million 1b n.a. ¹⁾ 2a EUR 1.534 million 2b n.a. ¹⁾	1a EUR 10.500 million 1b n.a. ¹⁾ 2a EUR 1.534 million 2b n.a. ¹⁾
Financing, of which FC/TC funds²⁾	1a EUR 11.537 million 1b EUR 2.965 million 2a EUR 12.271 million 2b EUR 1.380 million	1a EUR 11.537 million 1b EUR 2.965 million 2a EUR 12.271 million 2b EUR 1.380 million
Performance rating (overall efficacy)	1a TC: Phase 3 (sufficient overall) 1b FC: Phase 4 (slightly insufficient overall) 2a TC: Phase 3 (sufficient overall) 2b FC: Phase 5 (clearly insufficient)	

1) Since the FC components have provided smaller partial contributions for a variety of locations, it is pointless to cite total costs and the counterpart contribution. The parts that were directly assignable to the locations Selous and Lushoto fall under 1a and 2a.

2) The information on the FC funds pertains to the entire volume of funds allocated under these BMZ

numbers. The share of FC finance attributable to Selous and Lushoto amounts for 1b at project appraisal to EUR 1.719 million and at ex-post evaluation to EUR 1.535 million and for 2b) at project appraisal to EUR 0.901 million and EUR 1.182 million at ex-post evaluation.

Brief Description, Overall Objective and Programme Objectives with Indicators

Game Management in the Selous Game Reserve

The project was intended to protect the wildlife stocks in Selous and in the buffer zone from overexploitation through hunting and poaching and secure an adequate income for the government as well as for the local population from wildlife management in the reserve and in the buffer zone (project objective). The attainment of the objective was measured by the number of poached elephants, the profitable use of the hunting quota by the villages and the contribution of the Selous Game Reserve to government revenue. The project was to help (a) sustain the ecosystem in Selous and (b) make a lasting contribution to improving the conditions of life for the population (overall objective). The overall objective indicators pertain to (1) the stabilization of the stock of lead game species, (2) the improvement of the social and economic development indicators in the region and (3) the use of government revenue for a pro-poor policy.

Resource Conservation in Lushoto District

As of the early the eighties German development cooperation has supported the introduction of sustainable and participatory agriculture and forestry in Lushoto District in northeastern Tanzania. The project was to promote ecologically and economically sustainable land use (project purpose) and make a contribution to stabilizing or improving the conditions of life of the population in Lushoto District while slowing ecological degradation (overall objective). The project objective indicators set were (1) increased yields per hectare in major crops, (2) shift in land use as planned towards economically and ecologically sustainable practices and (3) the use of improved seed and plant material. The overall objective was to be measured by (1) the erosion damage to agricultural land, (2) social and economic development indicators in the region, (3) the sustainable supply of forest products and (4) the stabilization of water yield.

The division into the Selous and Lushoto components conforms with the definition of the TC measures. The FC project, Resource Conservation and Buffer Zone Development - Phase I, on the other hand comprised both boundary demarcation measures in the Selous Game Reserve (approx. 40% of funds) and aerial/satellite pictures, evaluation equipment and maps (approx. 60% of funds) for 5 different regions in northern Tanzania (including Lushoto) and for the Selous region. As to the FC mapping component, the following refers to the Lushoto region, which can be taken as representative for the other regions. The development of the silvicultural research centre in Lushoto was financed in Phase II of the FC project.

Programme Design/Major Deviations from Original Programme Planning and Main Causes

With TC funds, the **Selous project** provided assistance in strengthening the management capabilities of the reserve administration and the local population, drafting legal provisions for involving and benefiting the local residents and drawing up strategy papers for Selous and sector policy.

Beginning in the mid-nineties, FC funds have been used to finance the demarcation of boundaries (open strips in forests and boundary stones) as well as satellite pictures, maps and evaluation equipment for a geographical information system for the Selous Game Reserve (SGR).

In the **Lushoto project**, TC advised the partners in participatory land use planning and forest management, in introducing measures to conserve land and water and improve cattle breeds as well as in introducing and marketing cash crops (fruit and vegetables). Moreover, the TC contribution helped

raise awareness of environmental protection issues in the region, strengthened the district administration to enable it to continue with these approaches and provided guidance in reorganizing the agricultural and forest extension service. Several adjustments had to be made to objectives and strategies as more experience was gained.

Extensive aerial and satellite photos, evaluation equipment and maps were financed from FC funds (Phase 1) as of the mid-nineties to facilitate land use planning. As part of the FC component Phase 2 the Lushoto Silvicultural Research Centre (LSRC), which is subordinate to the Tanzanian Forest Research Institute (TAFORI) was rehabilitated and extended. The implementation was conducted largely as planned.

Key Results of Impact Analysis and Performance Assessment

Game Management in Selous Game Reserve

The dual programme objective of efficient management and sustainable use of wildlife resources in the SGR by the wildlife authority and the local communities has been achieved with differing levels of success: While the programme succeeded very well in strengthening the management capabilities of the reserve administration, it achieved only partial success in promoting local community participation. Some local villages were allowed to use a hunting quota for subsistence or commercial gain, but due to logistic difficulties most did not make full use of this and partly due to the complex and time-consuming implementation directives, not a single local community has yet been accorded the legal status of a wildlife management area. The latter would afford the local population legally assured access to income from hunting and use rights. The contributions to government revenue also fall far short of their potential scope.

Altogether, the project was able to make a significant contribution to the protection objective for the Selous Game Reserve (Part (a) of the overall objective), as evidenced by the stabilized stock numbers. For the most part, the programme was unsuccessful in improving the conditions of life of the local population (Part (b) of the overall objective) or achieved this to an unsatisfactory degree only. Altogether, the necessary prerequisites for raising income have been met and a few were implemented as pilot measures in individual cases. This does not, however, imply a general and direct improvement in the conditions of life for the local community areas.

An important step towards improving reserve management was the drafting of an initial management plan for 1998-2003. It provides a binding framework for all activities in the SGR and helps to assure a purposive and systematic management of the reserve. The revised version presented in 2003 is largely respected at the moment but has still not formally entered force. After the practical abandonment of the retention scheme (which provided for a fixed percentage of reserve income to be used for management), the provision of sufficient operating inputs for reserve management is no longer assured at the planned level. However, the maintenance of the facilities and the protection of wildlife can be sustained at a substantially higher standard than prior to project implementation.

SGR personnel have been continuously upgraded and trained although full-scale human resource development programmes could not be implemented. The GPS-assisted protection against poaching introduced in the SGR is up to the latest standards.

Besides satellite pictures and maps, FC funded approx. 800 km of boundary demarcation (passable routes and boundary stones) that provide for the first time clearly visible park borders for the local population, which is largely accepted and can be used by park personnel for control purposes.

Effective and regular patrols have substantially curtailed trophy poaching and brought ivory poaching almost to a standstill. As a result of the projects, the livestock of the Selous Game Reserve has been effectively protected and stabilized.

The developmental efficacy of the project, Game Management in the Selous Game Reserve, is rated as sufficient overall (Rating 3).

Resource Conservation in Lushoto District

The project was successful in preparing and implementing ecologically appropriate and economically attractive agricultural and forest production models (terracing, cattle sheds, spreading of animal dung, vegetable-growing, irrigation). It stood out due to its adaptive learning process and its ongoing adjustment of intervention strategies. At the end of the project term, the programme proffered solutions that were ecologically sound and economically viable and these were also assimilated into the decision-making processes of the farmers. The landscape has greened in the direct intervention zones (in comparison with the situation at the beginning of the eighties) and the immanent productivity loss through soil erosion has been halted. Dissemination beyond the direct intervention zone (approx. 20% of the total area) has, however, hardly succeeded at all and this is also unlikely in future without external support, particularly due to insufficient funding from the district administration.

The FC-funded maps have hardly been used at all for land use planning. At present, some of the capacities created and rehabilitated in the Lushoto Silvicultural Research Centre with FC assistance have been left unused, as the number of scientists employed there has not risen as foreseen but has actually decreased.

As to the improvement in the conditions of life for the people in Lushoto, the picture is mixed: The improvement in most social indicators such as basic education, health and per capita income is a positive development. Agricultural productivity and income, however, has failed to keep pace with rapid population growth. The exodus from Lushoto District indicates that there has been no sustainable improvement in the conditions of life and livelihood despite the interventions.

The developmental efficacy of the overall project, Resource Conservation in Lushoto District, is assessed as sufficient (Rating 3).

Summary Assessment of the Contributions of the Individual Projects to Objectives Achievement

In line with the GTZ matrix, the contribution of the TC project, Game Management in the Selous Game Reserve, merits a grade of 3 (sufficient developmental efficacy). This outcome consists of two differently rated subcomponents: While the protection of the game reserve received a positive rating by all criteria, the local population component suffers from considerable shortcomings, especially when it comes to effectiveness and sustainability.

Altogether, the contribution of the TC project, Appropriate Farming in the Usambara Mountains (Lushoto), is judged as sufficient overall (3) at the time of evaluation. Due, however, to insufficient funding from the district administration, future sustainability, that is, a continuation and expansion of the measures, is very dubious.

As per KfW matrix, the contribution of the FC project, Resource Conservation and Buffer Zone Development - Phase 1 (BMZ No. 1994 65 352), is rated overall as slightly insufficient (Rating 4) due to the largely ineffectual developmental impact of the mapping component (which made up about half of the total costs of the FC measures in this phase), despite the positive impacts in Selous (demarcation of boundaries). Each KfW subcriterion (effectiveness, significance/relevance and efficiency) receives the grade 4.

Owing to the little use made of the silvicultural research centre, the contribution of the FC project, Resource Conservation and Buffer Zone Development - Phase 2 (BMZ No. 1995 65 763) is clearly insufficient (Rating 5) with each KfW subcriterion (effectiveness, significance/relevance and efficiency)

being assessed with 5.

General Conclusions and Recommendations

Executing/Implementing agency capacity built up over many years by both evaluated projects could not be continued on this scale after the end of the project for lack of budget appropriations. Although the know-how imparted has not been lost, it would seem more efficient to build up capacity on a scale that can be maintained in the long term.

Although cooperation amongst the institutions was not the subject of evaluation, we would like to make a general point on FC/TC cooperation projects in the narrower sense (i.e. where cooperation is close at measures level or in service delivery). The following aspects should be taken into account:

- Where possible, the sets of project objectives in the FC and TC components should be identical in the relevant areas or at least broadly congruent.
- When one project implementing organization acts as lead agency it should ensure that responsibility is clearly assigned either to KfW or GTZ for all project activities, measures and outputs and that the respective interfaces are sharply delineated.
- Where the sets of objectives of FC and TC projects have to differ (e.g. because the project content only overlaps in some areas), overall coordination and allocation of responsibilities should only apply for the shared objective. Enlarging this to areas that are no longer covered by the respective project objectives can seriously jeopardize success.
- When assigning the respective responsibilities, prospective conflicts of interest should be avoided (such as engaging GTZ as a FC implementation consultant in a component it bears overall substantive responsibility for).
- In many cases it makes sense to document objectives and responsibilities in a written cooperation agreement.

Amalgamating completely independent packages of measures into one project to achieve a minimum scale is an unsuitable measure for raising efficiency, if the joint set of objectives is so abstract as to hamper proper monitoring.

Game Management in the Selous Game Reserve

In national parks or reserves with a large tourist potential, full cost recovery is possible by charging hunting and photo tourist fees. Legal provisions should be made for tried and tested self-financing mechanisms for projects where there is a danger that these may fall prey to fiscal-policy interests after project completion.

The existence of secondary markets for licences and rights issued by government (here for example hunting fees, leases and lodge franchises) is usually a sign that there is room to raise prices. If state goods or rights are traded on secondary markets, government should either raise prices directly or commission a market study to determine and harness the true economic potential.

Neither reserves nor game stocks can be safeguarded in the long term against the interests of the local population. For greater participation by the local communities, however, the competent authorities must be prepared to transfer relevant use rights to them or to an agency. Where the authorities or their decision-makers would suffer economic losses themselves as a result of this, the project design must provide for a realistic strategy to overcome the anticipated opposition.

Enabling local populations near game reserves to manage livestock in the buffer zone themselves can be a very long process and should only be attempted where there is a readiness for longer term commitment to bring the process to completion. Since the commercial use of game populations can overtax the management capacity of the local population, a specialized, commercial agency could be charged with this task on behalf of the user communities, accounting for the comparative advantages of all stakeholders (e.g. using local experience to regulate sustainable hunting quotas, deploying the local population as gamekeepers, etc.).

Resource Conservation in Lushoto District

As a rule, traditional subsistence farmers also act very rationally when it comes to resource allocation. The lack of acceptance of apparently 'more modern' farming methods may also be due to the farmers' greater know-how and experience. This is why it is always a good idea to adopt a participatory approach, where both sides can contribute their experience.

From the outset, the term and amount of subsidies used to raise the acceptance of more modern management methods should be specified clearly (and transparently for all sides) to avoid fostering a 'recipient mentality'.

If during the project term it becomes apparent that the project executing agency will not be able to continue the activities on its own after completion of assistance (in the present case, for instance, the agricultural extension service or the financing of investments by private farmers) the project design should be reappraised and other approaches adopted if need be. Exit strategies which are sustainable and can be funded should be developed early on together with the executing institution and/or target group.

Preparing aerial photos and obtaining satellite pictures and the associated equipment should be carefully considered in each individual case in view of the comparatively high costs. There are relatively few project examples where the high costs have been warranted by the actual benefit gained.

Legend

Developmentally successful: Ratings 1 to 3	
Rating 1	Very high or high degree of developmental efficacy
Rating 2	Satisfactory developmental efficacy
Rating 3	Overall sufficient degree of developmental efficacy
Developmental failures: Ratings 4 to 6	
Rating 4	Overall slightly insufficient degree of developmental efficacy
Rating 5	Clearly insufficient degree of developmental efficacy
Rating 6	The project is a total failure

Criteria for Evaluating Project Success

For evaluating the developmental efficacy of a project and its classification during the ex-post evaluation into one of the various levels of success described above, separate criteria were developed for the FC and TC components. The current guidelines for FC are shown on the homepage of the KfW development bank and can be seen on the following Internet page: http://www.kfw-entwicklungsbank.de/DE_Home/Evaluierung/index.jsp. Information on current evaluation guidelines for TC components are available from the evaluation division of the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ).