

GOVERNMENTS OF BURUNDI, D R CONGO, TANZANIA AND ZAMBIA  
GLOBAL ENVIRONMENT FACILITY (GEF)  
UNITED NATIONS DEVELOPMENT PROGRAMME (UNDP)  
UNITED NATIONS OFFICE FOR PROJECT SERVICES (UNOPS)

**UNDP/GEF Project on Partnership Interventions for  
the Implementation of the Strategic Action  
Programme for Lake Tanganyika  
(GEF ID 1017, PIMS 1941)**

**TERMINAL EVALUATION  
REPORT**

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## ACRONYMS AND ABBREVIATIONS

ADB, AfDB	African Development Bank
APR	Annual Project Report
CO	Country Office (of UNDP)
CPD	Country Programme Document (of UNDP)
CTA	Chief Technical Advisor
DAC	Development Assistance Committee (of the OECD)
DANIDA	Danish International Development Agency
DO	Development Objective
DRC	Democratic Republic of Congo
EA	Executing Agency (of GEF projects)
EIA	Environmental Impact Assessment
EU-COMESA	European Union-Common Market for Eastern and Southern Africa
FAO	Fisheries and Agriculture Organization (of the United Nations)
FFMP	Fisheries Framework Management Plan
FINNIDA	Finnish International Development Agency
GEF	Global Environment Facility
HIV/AIDS	Human Immunodeficiency Virus infection / Acquired ImmunoDeficiency Syndrome
IA	Implementing Agency (of GEF projects)
ICRAF	International Centre for Agro-Forestry
IMF	International Monetary Fund
INECN	National Institution for the Conservation of Natural Resources (of Burundi)
IUCN	International Union for the Conservation of Nature
IWC	International Waters Cluster (of UNOPS)
KEOC	Kenya Operations Centre (of UNOPS)
KFW	Kreditanstalt für Wiederaufbau
LogFrame	Logical Framework Matrix
LPAC	Local Project Appraisal Committee
LTA	Lake Tanganyika Authority
LTBP	Lake Tanganyika Biodiversity Project
LTRIMP	Lake Tanganyika Regional Integrated Management Programme
MC	Management Committee
M&E	Monitoring and Evaluation
MLNREP	Ministry of Lands, Natural Resources and Environment Protection (of Zambia)
MNR&T	Ministry of Natural Resources and Tourism (of Tanzania)
MTE	Mid-Term Evaluation
NCU	National Coordination Unit
NDF	Nordic Development Fund
NEX	National Execution modality
NGO	Non-Governmental Organization
NIM	National Implementation Modality
NRM	Natural Resources Management
OECD	Organization for Economic Cooperation and Development
OP	Operational Programme (of the GEF)
PCU	Project Coordination Unit
PDF	Project Development Facility
PIMS	Project Information Management System (of UNDP/GEF)
PIR	Project Implementation Review
PM	Project Manager
PMC	Project Management Committee
PMU	Project Management Unit
PRASAB	Programme de Rehabilitation et d'Appui au Secteur Agricole au Burundi
PRC	Project Regional Coordinator
PRODAP	Project to Support Lake Tanganyika Integrated Regional Development Programme

ProDoc	Project Document
PRSP	Poverty Reduction Strategy Paper
PSC	Project Steering Committee
QPR	Quarterly Progress Report
RTA	Regional Technical Advisor (of UNDP/GEF)
SAP	Strategic Action Programme
SETEMU	Municipal Technical Services in Bujumbura (Burundi)
SIMMORS	Sustainable and Integrated Management of the Malagarasi-Muyovozi Ramsar Site
TDA	Transboundary Diagnostic Analysis
TE	Terminal Evaluation
ToRs	Terms of Reference
TRAC	Target for Resource Assignment from the Core (of UNDP)
UN	United Nations
UNCT	United Nations Country Team
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNEG	United Nations Evaluation Group
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNOPS	United Nations Office for Project Services
USD	United States Dollar
VPO	Vice-President's Office (in Tanzania)
WANI	Water and Nature Initiative
WB	World Bank
WWF	World Wildlife Fund (also Worldwide Fund for Nature)

## PROJECT AND EVALUATION DESCRIPTOR

<b>PROJECT TITLE:</b> Partnership Interventions for the Implementation of the Strategic Action Programme for Lake Tanganyika				
<b>GEF Project ID</b>	1017	<b>PROJECT FINANCING (in US Dollars)</b>		
<b>UNDP Project ID</b>	PIMS 1941		<b>At Endorsement</b>	<b>At Completion</b>
<b>Countries</b>	Burundi, DR Congo, Tanzania, Zambia	<b>GEF Trust Fund</b>	<b>13,500,000</b>	<b>13,500,000</b>
<b>Region</b>	Africa - Lake Tanganyika	<b>IA/EA own</b>	0	1,300,000
<b>GEF Focal Area</b>	International waters	<b>Governments</b>	2,089,500	4,869,000
<b>GEF Operational Programme</b>	OP9 Integrated Land and Water Multiple Focal Area; IW-SP3 Freshwater Basins	<b>Others</b>		
<b>Executing Agencies</b>	United Nations Office for Project Services (UNOPS) for Regional, Burundi and DRC Components; Tanzania and Zambia Governments for Tanzania and Zambia Components	<b>ADB, NDF, IUCN Private Sector</b>	45,800,000	22,480,000
<b>Other partners</b>	World Wildlife Fund (WWF); International Union for the Conservation of Nature (IUCN); World Agroforestry Centre (ICRAF)	<b>Total co-financing</b>	<b>47,889,500</b>	<b>28,649,000</b>
		<b>Total project cost</b>	<b>61,389,500</b>	<b>42,149,000</b>
<b>PROJECT TIMEFRAME</b>	<b>ProDoc signature date</b> September 2008	<b>Original closing date</b> August 2012	<b>Revised closing date</b> August 2013	
<b>EVALUATION TIMEFRAME</b>	<b>Assignment start</b> 01 February 2013 <sup>1</sup>	<b>Prelim findings</b> 23 April 2013	<b>Draft report</b> 20 May 2013	<b>Final report</b> 01 July 2013
<b>EVALUATION TEAM</b>	Philip Tortell (International Evaluator), in collaboration with Joseph Lushombo for DR Congo and Burundi Components and Benaiah Benno for Tanzania Component			

<sup>1</sup> The Zambia Component was the subject of a separate Terminal Evaluation in 2012. This was carried out by the same evaluator and the findings are incorporated in this overall project evaluation. However, the evaluation of the comprehensive regional project was carried out starting in February 2013 as noted above.

## EXECUTIVE SUMMARY

### The Project

This is the independent Terminal Evaluation of the project on *Partnership Interventions for the Implementation of the Strategic Action Programme for Lake Tanganyika (GEF ID 1017, PIMS 1941)* comprising five components – a Regional Component and one each for Burundi, DR Congo, Tanzania and Zambia. The project benefited from a grant of USD13.5 million from the GEF Trust Fund and USD28.649 million in co-financing. UNDP was the Implementing Agency. The Regional Component together with the Burundi and DR Congo Components were executed by UNOPS, whereas the Tanzania and Zambia Components were nationally executed. The project started in September 2008 and was planned to last four years, however, some components experienced delays and different components started at different times; and, even with extensions, not all components benefited from the full four years. Final closure is expected at the end of August 2013.

The project comes under the International Waters focal area of the GEF, more specifically under Operational Programme #9 – Integrated Land and Water Multiple Focal Area. The project Objective was – *To implement the prioritised activities of the Strategic Action Programme so as to achieve sustainable management of the environmental resources of Lake Tanganyika*; and this was expected to be achieved by targeting four Outcomes which focussed on: regional institutional strengthening and cooperation, reducing lake pollution through wastewater treatment, reducing sediment discharge through judicious land use, and, regional monitoring and management systems.

### The Evaluation

The Terminal Evaluation has been carried out according to the guidance and principles of UNDP, the GEF and UNEG which require such an evaluation in the closing stages of a project for the benefit of the key stakeholders including the GEF as the main source of funding, UNDP as the Implementing Agency and the Governments as the prime beneficiaries. It aimed to provide a comprehensive overall assessment of the project and critically assess achievements, administrative and technical strategies, issues and constraints. The methodology employed in this evaluation was planned and described in the Inception Report which was presented in the early stages of the mission.

Two basic tools were used in the search for primary data and information – firstly documents review, secondly face-to-face consultations. Face-to-face meetings were the preferred method of consultation and were carried out with a wide catchment of stakeholders. Some 150 persons were met and consulted in all ranging from UNDP and project management personnel (20%), partner agencies (18%), Central Governments and LTA (12%), Local Governments (17%), and various beneficiary communities and individual farmers (33%). The TE extended to each of the four riparian countries namely, Burundi, DR Congo, Tanzania and Zambia and included meetings outside the Tanganyika region in Nairobi, and Johannesburg. In each country the major focus of investigations was at the village level, for example Mpulungu in Zambia, Uvira in DR Congo, Kigoma in Tanzania and Buyenzi in Burundi.

Following the gathering of data and information, the evaluation focused on analysis, discussion and drafting and a draft version of the report was delivered to UNDP and UNOPS to be released for comments. The draft was refined to reflect comments received, and the final report produced.



## Key Findings and Conclusions

**Project design and relevance** The project was very relevant to the Lake Tanganyika environment and the needs of the riparian countries, as well as the UNDP Country Programmes and the GEF objectives for international waters. It arose out of an agreed Strategic Action Programme which was underpinned by a thorough and extensive Transboundary Diagnostic Analysis. This model, which has been applied extensively by the GEF in similar transboundary and shared bodies of water, has been effective in gaining the cooperation of the riparian states in their management of shared resources on a sustainable basis.

**Project implementation efficiency** This was a complex project with different implementation modes and it cannot have been easy for the PCU to hold it together as one project. Two countries were in a post-conflict situation with other pressing priorities. The other two countries, had a record of efficient national execution of projects and could be expected to do well. It is interesting to note that of the two countries that adopted the NEX implementation modality, one did very well and the other not so well; while of the two countries in the post-conflict recovery mode with agency execution, one also did very well and other not so well. It would seem that the efficiency of project implementation was not influenced as much by the implementation modality, as by the circumstances surrounding the project and the expertise of PMs and PMUs. The PCU for the **Regional** component was in trouble at the time of the MTE, but it revived, recovered lost ground, and made very good progress with the arrival of a new PRC. Its rating finished as Moderately Satisfactory (MS). **Zambia**, which was in the NEX modality, with a very stable PMU and a skilful PM implemented the project very efficiently, proceeded at its own sustained speed and achieved a Satisfactory (S) rating overall. Whereas **Tanzania**, also in the NEX modality, had three different PMs and seemed to suffer from the distance between Dar es-Salaam and Kigoma – its overall rating was Moderately Satisfactory (MS). On the other hand, the **DR Congo** component which was agency executed and entrusted to WWF, was implemented very efficiently and achieved an overall rating of Satisfactory (S) in spite of the difficult circumstances – the choice of WWF as project implementer was instrumental in this success. In the case of **Burundi**, neither the PM nor the PMU were given much latitude for reasons which may have been valid at the time. The engagement of KEOC to manage the sewer reticulation works may have solved the problem of weak capacity but it introduced an element of inefficiency. It is possible that had the reticulation contract been handled at the PMU level with the full collaboration of SETEMU, project implementation may have been more efficient and the rating could have been better than the current Moderately Satisfactory (MS).

**Project results and effectiveness** The Outcome with the two most direct, explicit and visible results was the least successful. In Burundi, it suffered initially from Government decisions, and then from the difficulties which arose between two arms of the same organization. In Tanzania, the inability of the government to take up the NDF loan to build the wastewater treatment plant deprived the project of the foundation on which its work was to be built.

It is interesting to note that the project was most successful when it worked at community level. As a foundational project<sup>2</sup> it designed and implemented a number of pilot level interventions which form the foundation for true results to arise in the future. These intermediate results included capacity, awareness, demonstrations, governance frameworks, tools and methods. The project promoted new approaches to the use of land for agricultural purposes; it also built a strong case for the protection of forests and other vegetative cover; and, in doing so, it brought significant improvements in income that farmers earn from their work on the land and this has been translated into an improvement in their quality of life. The project has also raised awareness of the benefits that can arise through wise land use such as sustainable forest management, and conservation agriculture; it has also enhanced the capacity of local officials dealing with the primary production sector as well as those in local government. Even in wastewater management, where it has not

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<sup>2</sup> Defined as one whose outcomes do not achieve results (*i.e.* changes in the development situation) but pave the way for results.

been entirely successful, the project has raised awareness and sensitivity to the values and vulnerabilities of the lake and this is a valuable “result” at community level.

At the regional level, the project has been instrumental in the setting up and strengthening of the Lake Tanganyika Authority (LTA) and its various organs; setting the foundation for joint management of the Lake’s resources; designing a regional monitoring system leading to a regional information management system. It has set the scene for cooperation and mutual sharing of know-how and expertise, problem-solving, benefits, responsibilities. Among the products that the project has produced or improved are the LTA itself, the Convention and its protocols, the revised and updated SAP and the NAPs.

The governments must now give effect to the cooperative framework which has been set up by the project for addressing priorities. Under the leadership of the LTA which will obtain their coordination, accountability, and feedback loops, the governments can achieve results they could not achieve on their own. They will also be able to assess the results achieved on a continuing basis through a joint monitoring programme. The project has provided momentum to the political commitment of the four governments to cooperate on the management of Lake Tanganyika and its resources for the common good of the inhabitants of the lake catchment.

**Monitoring and evaluation** It would seem that none of the components had an explicit Monitoring and Evaluation Plan. Apart from the position of M&E Director in the LTA, only the DR Congo Component had an M&E staff. This means that in the other components no project staff had specific responsibility for monitoring. On the other hand, M&E budgets appear to have been set aside in some cases. With the exception of the DR Congo Component, there were no explicit Baselines and many “Indicators” were merely targets and did not satisfy the SMART criteria.

An environmental monitoring strategy has been developed but implementation is some way off. Even then, data gathering is only the beginning of the process and even more important is the analysis, interpretation and manipulation of the data to convert them into information and knowledge. Finally, there is a need to set up a system to archive, store and retrieve the information – an information management system.

**Sustainability and proposals for future directions** During consultations and interviews with stakeholders at all levels, a message which was repeated often was for further continuing support through an extension of the project or a new follow-up project. Almost without exception, this request was made because of a misunderstanding of the aims, constraints and purpose of pilot interventions. However, regardless of this, the evaluator has recognized the need for further work at two levels – immediate extension of the present project and a distinct follow-up project.

In the present situation, the two results targeted under Outcome 2 in Kigoma and in Buyenzi have not been achieved. While the Kigoma wastewater treatment plant cannot be expected to be built within a reasonable time, there is optimism that the Buyenzi sewage reticulation could be taken to an acceptable level within a 2-3 month extension. Such an extension would also help to safeguard the investment made and reinforce project benefits. It would also strengthen the likelihood of sustainability for the project products and services.

Of the countries surrounding Lake Tanganyika, only one is considered as lower middle income and the others are among the poorest. Without support, the region is not able to build on the achievements of the project and replicate the pilot activities so as to achieve the desired impacts. Neither can the region dedicate the resources necessary to continue with the implementation of the priorities identified in the SAP. Further support is essential and involvement by the GEF is likely to leverage the further assistance needed through financing partners.

The following summary focuses on the key elements of the project, including all those that were required to be rated. They arise from the analyses made of the data and information obtained.

CRITERION	SUMMARY COMMENTS	RATING
<b>PROJECT FORMULATION</b>		
Project concept and design	While the project design was sound, the ProDocs were weak in some essential components such as the LogFrame, Indicators, Risk Management, Baselines and Targets. The wording used in the Outcomes was over-ambitious and not appropriate for a foundational project dealing with pilot scale work over a short four year timeframe. One further weakness in project design was the apparent lack of provision for collaboration, exchange and mutual learning. While this did take place at the political and high decision-making levels, and (although to a lesser extent) at the level of the respective Project Managers, the project did not facilitate communication at the technical levels, such as in water quality sampling or at the community level such as on cultivation and farming methodology	<b>Moderately Satisfactory (MS)</b>
Relevance	The institutional work at the LTA level, the cultivation work in the catchments, and the wastewater work carried out by the project were all highly relevant to the needs of the region and the needs of the four countries. This was to be expected since the project arose out of the long and thorough process of the Transboundary Diagnostic Analysis which led to the Strategic Action Programme which in turn spawned the project. The project is also seeking global benefits as targeted by the GEF which, under OP#9 sought the integration of sound land and water resource management strategies through changes in sectoral policies and activities that promote sustainable development	<b>Highly Satisfactory (HS)</b>
Stakeholder participation in formulation	Although project formulation coincided with the post-conflict period of two of the countries, accounts of broad stakeholder participation abound. This was in the TDA exercise and the formulation of the SAP (through GEF support) which together provided the foundation for the project. Stakeholder involvement ranged from regional (ILTMA, the precursor of the LTA) and national high level decision-makers, to communities who were consulted down to sub-district level for both catchment management and fisheries components.	<b>Satisfactory (S)</b>
<b>PROJECT IMPLEMENTATION</b>		
Project Governance	As with other aspects of this project, its governance was somewhat complex – there were five Steering Committees, one for each component. There were also local level Project Management Committees for some components. Performance was across a range and the rating reflects the middle ground	<b>Moderately Satisfactory (MS)</b>
Project Administration and Management	The ProDoc warned that “ <i>These management arrangements appear, at first sight, to be complex</i> ” and this evaluation has confirmed the complexity - there were three project documents, five project management units (one of which is designated as a coordinating unit), four national Project Steering Committees, three Executing Agencies. A further complication was the difference in effective starting dates for the different components and their different closure dates and/or extensions. This made cross-country management and coordination challenging – because the country Projects were at different steps in the project cycle. However, and in spite of this, the project was managed well overall.	<b>Satisfactory (S)</b>
<b>Implementation Approach</b>		
Stakeholder participation in implementation and partnerships	Stakeholder involvement in project implementation has been at a high level, and this is particularly so for those at community and grassroots level	<b>Satisfactory (S)</b>
Risk management	Consideration of risks lacked the likelihood of the risk occurring. Neither did the ProDoc put forward any mitigation measures. There was also one risk which was not identified by the ProDoc – the risk arising from reliance by the project on a result from a co-funding agency activity, namely, the building of the Kigoma Wastewater Treatment facility through a loan from the Nordic Development Fund. When this unidentified risk cropped up, the project did not have a response	<b>Moderately Satisfactory (MS)</b>
<b>Project finances</b>		
Financial planning and management	Overall budget planning, management and reporting were weak throughout the five components. Not all PMs were in full “control” of their respective budgets; there was a case of financial misappropriation in DR Congo; and the impasse between UNDP and UNOPS on the Burundi statement of accounts remains to be resolved	<b>Moderately Unsatisfactory (MU)</b>
Co-financing	The ProDoc presents a very confused picture of the co-financing expected for the project. The information provided is ambiguous and the figures do not always add up. Co-finance was the subject of protracted exchanges with the respective PMU and even then, the information provided was often erroneous and/or incomplete. The role of co-financing is not well understood	<b>Moderately Unsatisfactory (MU)</b>
<b>Monitoring and Evaluation</b>		
M&E Design, Plan and Budget	None of the components had an explicit Monitoring and Evaluation Plan. Apart from the position of M&E Director in the LTA, only the DR Congo Component had an M&E staff. This means that in the other components no project staff had specific responsibility for monitoring. On the other hand, M&E budgets appear to have been set aside in some cases. With the exception of the DR Congo Component, there were no explicit Baselines and many of the so-called Indicators were merely targets and did not satisfy the SMART criteria	<b>Moderately Satisfactory (MS)</b>
Use of LogFrame and Adaptive Management	There is no evidence of systematic use of the LogFrame in monitoring and evaluation leading to adaptive management	<b>Moderately Unsatisfactory (MU)</b>
<b>Role and performance of IA and EAs</b>		

UNDP as the GEF IA	The role of UNDP as the GEF IA for this project represented a slightly different approach from usual, reflecting the specific and complex nature of this project. Two out of four Country Offices were involved directly in project execution while the other three components were the subjects of agency execution by UNOPS, and there was no lead Country Office to perform the role of IA. As a result, the RTA and the UNDP Regional Office provided far more support than is usual. The role of UNDP in this project also extended into co-financing and the Country Offices in Dar es-Salaam and Lusaka have made, and will make (for extensions), significant cash contributions.	<b>Satisfactory (S)</b>
EAs – UNOPS-IWC, VPO (Tanzania), MLNREP (Zambia), WWF, UNOPS-KEOC, ICRAF, IUCN	The performance of partners serving as Executing Agencies and sub-contractors ranged from Unsatisfactory to Satisfactory, with the latter pushing the balance towards a middle rating.	<b>Moderately Satisfactory (MS)</b>
<b>PROJECT RESULTS</b>		
<b>Attainment of Overall and Regional Objective and Outcomes</b>		
<b>Objective:</b> To implement the prioritised activities of the Strategic Action Programme so as to achieve sustainable management of the environmental resources of Lake Tanganyika	Only partial progress has been made towards the project Objective, however, and in spite of the weak and unhelpful indicators, the effort overall has been commendable and merits a rating which recognizes the significant improvement on the results seen at the time of the MTE and reflects the “turn around” that has been achieved	<b>Satisfactory (S)</b>
<b>Outcome 1:</b> Regional and national institutions established and have internalized the implementation of the SAP and provide institutional support for the cooperative management of Lake Tanganyika under the ratified Convention.	The drafting and adoption of the NAPs by each of the four countries is a sign that the SAP has been internalized and that implementation has begun. However, cooperative management of lake resources remains elusive – there are plenty of opportunities for the four countries to work together, share experiences, resolve mutual problems, and attain mutual benefits. The project has prepared the way for this and the Outcome has been partly achieved	<b>Moderately Satisfactory (MS)</b>
<b>Outcome 2:</b> The quality of water of Lake Tanganyika is improved at two identified pollution hotspots through enhanced wastewater management	The project was looking for a very simple result – <i>Water quality improvement at two locations</i> . In Kigoma, the project relied on a co-funded activity which did not eventuate while in Bujumbura the contractors have not delivered to the extent expected. This Outcome has not been achieved, however, KEOC may still deliver at Buyenzi, and the rating could be revised upwards	<b>Unsatisfactory (U)</b>
<b>Outcome 3:</b> Demonstration catchment management sites contribute to the reduction of sedimentation and provide significant livelihood benefits to local people, seeking long-term adaptation measures to changing climatic regimes	The project was looking for <i>Sediment discharge reduction</i> , and <i>Significant livelihood benefits</i> and from the PCU reports there are good signs that both have been obtained. And, in spite of the lack of a clear baseline and the far too short timeframe of the project, the evaluator was able to confirm reduced sediment loads at the pilot sites and very successful AIGs supported through efficient revolving funds with significant livelihood benefits	<b>Satisfactory (S)</b>
<b>Outcome 4:</b> Regional monitoring and management systems contribute to the long-term sustainable management of Lake Tanganyika and its natural resources	The Outcome sought <i>Regional monitoring and management systems</i> and the evaluator was looking for proof of regular monitoring and (adaptive) management. The evaluator is aware of a number of preparatory consultancies proposing various monitoring measures, and while some monitoring is known to have taken place, no monitoring “system” has been observed, and certainly not one which is producing data and information of use to managers and decision-makers. The draft Implementation Strategy is merely a proposal and the system has yet to be set up – this Outcome has only been partly achieved	<b>Moderately Satisfactory (MS)</b>
<b>Attainment of Burundi Outputs and Outcome</b>		
<b>Outcome:</b> Wastewater management in Bujumbura strengthened through infrastructure completion, standards implementation, and community awareness raising	Under the Burundi Component, the project sought completed infrastructure, standards adopted and implemented and raised community awareness – all this so as to achieve a decrease in point source pollution of the lake. In spite of the scope of work carried out, the Burundi Outcome has not been achieved. However, this could change significantly if the Buyenzi works are completed effectively	<b>Moderately Satisfactory (MS)</b>
<b>Attainment of DR Congo combined Outcomes</b>		
<b>Outcome:</b> Government and community natural resource management institutions strengthened	The DR Congo Component sought stronger institutions, improved catchment status with reduction in soil loss and sediment loads, and improved land-use practices. By and large these have been achieved and the DR Congo Component has been successfully executed	<b>Satisfactory (S)</b>

<p>with capacity to improve catchment status and reduce sediment load; <i>and</i>, The natural resource base in and around Uvira sustainably managed through improved land-use practices with reduced soil loss and sediment loads</p>		
<p><b>Attainment of Tanzania Outputs and Outcomes</b></p>		
<p><b>Outcome 1:</b> Sedimentation into Lake Tanganyika from pilot villages is reduced through integrated catchment management, thereby improving lake habitats</p>	<p>The catchment works carried out by the project do represent a satisfactory approach to integrated catchment management. But the "monitoring" carried out (and the short timescale) was not adequate to establish whether this had any impact on the sediment load carried by the rivers. If results can indeed be seen, it is safe to assume that they are the result of the project, however, it is far too early to determine with any certainty that this has had a positive effect on lake habitats as targeted by the Outcome</p>	<p><b>Moderately Satisfactory (MS)</b></p>
<p><b>Outcome 2:</b> Wastewater management at Kigoma-Ujiji Township strengthened, reducing point pollution levels of Lake Tanganyika waters and so improving biodiversity habitats</p>	<p>The basis for this Outcome was the construction of wastewater treatment facilities through a co-financed activity outside the influence of the UNDP/GEF project – unfortunately, this activity did not eventuate. Therefore, while the project may have strengthened wastewater management in Kigoma at the institutional capacity level, the ultimate outcome/result of reducing point sources of pollution and improving biodiversity habitats, strictly speaking, cannot be expected to be achieved</p>	<p><b>Moderately Unsatisfactory (MU)</b></p>
<p><b>Attainment of Zambia Outputs and Outcome</b></p>		
<p><b>Outcome:</b> Levels of siltation/sedimentation in rivers flowing into Lake Tanganyika reduced in the pilot sites</p>	<p>The Zambia Component sought to reduce sedimentation and conserve biodiversity. From the information available, the first target of reduced sediment in rivers has been met or will be met. And although the conservation of biodiversity is not so easy to determine, the Zambia Outcome is considered to have been successful</p>	<p><b>Satisfactory (S)</b></p>
<p><b>Sustainability</b></p>		
<p>Institutional and social sustainability</p>	<p>The project has strived to build institutional capacity and it has been successful. It has worked through existing administrative structures and this has created a strong sense of ownership. Key government organizations have been actively involved technically, in an administrative and supportive role throughout project execution. And, the project engaged with stakeholders at local and community level. The project worked through existing government and non-governmental institutions to ensure ownership and the integration of project activities into the mainstream of district development plans, community plans and aspirations. By working with traditional leadership project activities became an integral part of the village and area level development efforts, driven by the communities themselves</p>	<p><b>Highly Likely (HL)</b></p>
<p>Financial sustainability</p>	<p>Many of the plans, arrangements and other assumptions in exit strategies for handing over project components to inheriting institutions, involved the need for financial resources. Sometimes this included the identification of potential sources of continuing or new funding support, but most often the strategy or plan did not go that far. At village and district level, where the project has managed to get a legislative basis for its new approach, funding could arise through various levies, taxes and licensing fees applied for natural resource use. This will, in turn, depend on the right institutional and policy frameworks. It was heartening for the evaluator to be assured by many key government institutions in all four of the riparian countries that they see project interventions to be part of their core function and that they will continue these through their institutional budgetary resources and through existing donor funding. However, this is easier said than done and its likelihood is not high</p>	<p><b>Moderately Likely (ML)</b></p>
<p>Environmental sustainability</p>	<p>More research, survey and analytical work is required before environmental sustainability can be assured. Research and monitoring are required in the medium to long term, to determine the comparative effectiveness of various land use practices in reducing sedimentation, including riparian buffer strips, planted and allowed to mature naturally. The problem created by deforestation for charcoal production must also be addressed if erosion and sedimentation are to be avoided. Finally, environmental sustainability needs to take into account the changing climate. Research is required to devise strategies to overcome the negative impacts of climate change and capitalize on the positive impacts.</p>	<p><b>Moderately Unlikely (MU)</b></p>
<p><b>OVERALL PROJECT RATING</b></p>	<p>The project was very focussed on the two SAP priorities of sediment load reduction and elimination of point sources of pollution. As such, it was very relevant to all four countries and the region. According to the Outcomes, it was to do this by strengthening regional and national institutions and creating the framework for cooperation; engaging local stakeholders in land use practices that prevent erosion and sediment run-off on a pilot/ demonstration scale in the expectation that the project achievements would be upscaled and replicated by those inheriting them; the diversion and treatment of waste streams in wastewater treatment facilities; and, the setting up of a regional monitoring system. The project appeared fully owned by the Governments and relevant people of Burundi, DR Congo, Tanzania and Zambia. It was reasonably governed and although aspects of its co-financing were not robust, and while its monitoring may not have led explicitly to adaptive management, overall it was well managed and it has been effective in achieving most of the intermediate results that it targeted.</p>	<p><b>Moderately Satisfactory (MS)</b></p>

## Lessons emerging

- The more opportunity for evaluators to work at grassroots level, the better basis for the evaluation and the stronger the chances of sustainability of project products and services.
- Reliance on another project as a prerequisite is very risky and project design must set up mitigation measures to deal with non-delivery by the other project.
- To the extent possible, countries participating in regional projects should be treated equally, provided with the necessary support to make up for weaknesses in capacity, and allowed to participate as equal partners.
- There is a need for the UNDP Evaluation Office to establish procedures to ensure that key documents provided to evaluators are the most up to date versions.

## Recommendations<sup>3</sup>

**7.1** The LTA should identify the areas of work and initiatives that need to be tackled as an implementation of the SAP and in search of the sustainable management of Lake Tanganyika resources. In parallel, the LTA should investigate the levels of capacity and achievement, if any, in the four riparian countries in the relevant disciplines. It should then match the needs with the capacity and achievement and share the leads in an equitable fashion thus creating centres of excellence. The centres must not exercise any monopolistic claims on the respective work and initiatives, but function as firsts among equals.

**7.2** In each of the four countries (including Burundi), the relevant government and private sector organizations responsible for Agriculture, Forestry, Water Management, Land-Use Planning and other relevant responsibilities should collaborate to formulate a joint proposal for a project which will research and monitor the comparative effectiveness of various land use practices to reduce sedimentation. The investigations should also cover the effectiveness of riparian buffer strips, planted and allowed to mature naturally. UNDP could advise on an appropriate source of funding support.

**7.3** UNDP should obtain the concurrence of GEF and reach agreement with UNOPS-IWC as the EA, for an extension of the Burundi Component until the end of July 2013. This extension will be at no additional cost to GEF. It will also be necessary to delay the wrap-up of the Regional Component until the end of August 2013 to allow for an orderly closure of the overall project.

**7.4** UNDP should formulate a new project to be presented for funding to the GEF and other donor partners. The project should strengthen the LTA and promote its leadership role; it should focus on initiatives that require collaboration such as the regional monitoring system, fisheries management, applied research on the effectiveness of various farming techniques, exploring renewable energy to reduce reliance on charcoal and fuel wood. The project should run for five to six years and be executed regionally (possibly by the LTA) with leading positions assigned to the four countries on an equitable and capacity basis, and furthering the idea of centres of excellence proposed under 7.1 above.

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<sup>3</sup> The same numbering for recommendations as in the full report has been retained so as to avoid confusion.

# 1 INTRODUCTION

## 1.1 Purpose of the evaluation<sup>4</sup>

This is the independent Terminal Evaluation (TE) of the United Nations Development Programme/Global Environment Facility (UNDP/GEF) *Project on Partnership Interventions for the Implementation of the Strategic Action Programme for Lake Tanganyika*. The overall, comprehensive evaluation which is the subject of this report was carried out by a sole evaluator. However, country level evaluations were also carried out for Zambia, DR Congo and Tanzania and these contributed to this comprehensive TE.

Lake Tanganyika is a globally important hotspot of freshwater biodiversity, which contains almost 17% of the world's available surface freshwater, and serves as an irreplaceable source of clean water, transportation and economic opportunities for an estimated 10 million people in its riparian countries. The project aimed to address major environmental challenges in the lake basin<sup>5</sup> including pollution, sedimentation, habitat destruction, overexploitation of natural resources, and the effects of global climate change. The TE is carried out according to the policies of both UNDP and the GEF which require such an evaluation in the closing stages of a project. It is carried out for the benefit of the key stakeholders including the GEF as the main source of funding, UNDP as the Implementing Agency and the Governments as the prime beneficiaries.

The Terminal Evaluation is intended to provide a comprehensive overall assessment of the project and serves as an opportunity to critically assess administrative and technical strategies, issues and constraints. The evaluation set about attempting to provide answers to the following questions:

- Did the project identify and respond to a real need in the region and in each of the participating countries? Did it respond to the objectives of the GEF? (= relevance and design)
- Did it do it well? (= efficiency)
- Did it achieve the targeted results? (= effectiveness)
- Are the results sustainable? (= sustainability)

The TE was expected to establish whether the Project had achieved its goal, objective and outcomes. Specifically, according to the ToRs (Annex 1), the Terminal Evaluation was expected to perform the following tasks:

- Review all relevant project documentation such as workplans, outputs, monitoring reports, Inception Reports, minutes of Steering Committee meetings and other relevant meetings, Project Implementation Reports (PIRs/APRs), quarterly progress reports, and other internal documents including consultant and financial reports and the MTE reports together with the management responses.
- Review specific project products including content of the project website, datasets, management and action plans, publications and other materials and reports.
- Consult the Regional Project Coordinator and other project staff in the regional PCU.
- Consult the National Project Managers and other project staff of the national PMUs.
- Consult the Lake Tanganyika Authority Directors.
- Consult representatives of partner organisations involved in project implementation (ICRAF, IUCN, WWF).
- Consult relevant stakeholders, including UNDP personnel, partners supporting the LTRIMDP implementation including AfDB (Senior Fisheries Officer and NCU Staff), FAO, Nordic Fund, and NGOs.
- Consult project beneficiaries in the riparian countries
- Share preliminary findings, present a draft report for comments and produce the final Terminal Evaluation report.

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<sup>4</sup> Taken from the evaluation Terms of Reference (Annex 1)

<sup>5</sup> Lake Tanganyika basin in this report refers to both the lake itself, as well as its catchment area

## 1.2 Scope and methodology

### 1.2.1 The GEF monitoring and evaluation principles

In accordance with the monitoring and evaluation policy of the GEF<sup>6</sup>, this evaluation is guided by, and has applied, the following principles:

**Independence** The Evaluator is independent and has not been engaged in the Project activities, nor was he responsible in the past for the design, implementation or supervision of the project.

**Impartiality** The Evaluator endeavoured to provide a comprehensive and balanced presentation of strengths and weaknesses of the project. The evaluation process has been impartial in all stages and taken into account all the views received from stakeholders.

**Transparency** The Evaluator conveyed in as open a manner as possible the purpose of the evaluation, the criteria applied and the intended use of the findings. This evaluation report aims to provide transparent information on its sources, methodologies and approach.

**Disclosure** This report serves as a mechanism through which the findings and lessons identified in the evaluation are disseminated to policymakers, operational staff, beneficiaries, the general public and other stakeholders.

**Ethical** The Evaluator has respected the right of institutions and individuals to provide information in confidence and the sources of specific information and opinions in this report are not disclosed except where necessary and then only after confirmation with the consultee.

**Competencies and Capacities** The credentials of the Evaluator in terms of his expertise, seniority and experience as required by the terms of reference (Annex 1) are provided in Annex 2; and methodology for the assessment of results and performance is described below (section 1.3).

**Credibility** This evaluation has been based on data and observations which are considered reliable and dependable with reference to the quality of instruments and procedures and analysis used to collect and interpret information.

**Utility** The Evaluator strived to be as well-informed as possible and this ensuing report is considered as relevant, timely and as concise as possible. In an attempt to be of maximum benefit to stakeholders, the report presents in a complete and balanced way the evidence, findings and issues, conclusions and recommendations.

Furthermore, the rights and confidentiality of informants have been protected to the extent possible as required by the UNEG Guidelines<sup>7</sup>.

### 1.2.2 Evaluation dimensions

The evaluation exercise in effect commenced in mid-May 2012 with the country level evaluation of the Zambia Component. Following consultation visits to Lusaka and Mpulungu, and the presentation of Preliminary Findings, the mission ended on 22 June 2012. After a period of about two weeks, the evaluator delivered his draft report with an invitation for comments from stakeholders, and the Final Evaluation Report on the Zambia Component was delivered early in August 2012.

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<sup>6</sup> Global Environment Facility (2006) *The GEF Monitoring and Evaluation Policy*.

<sup>7</sup> United Nations Evaluation Group (UNEG) (2007) *Ethical Guidelines for Evaluators*.



The evaluation resumed in February 2013 and was carried out over a period of four months until June 2013 and it coincided with the final few weeks of the project. Work commenced from homebase in early February 2013 and the First Mission started on Tuesday 19 February with a visit to Nairobi (with a side trip to Nakuru) so as to consult with three project partners, namely, WWF, ICRAF and IUCN.

From Nairobi I travelled to Bujumbura and, apart from extensive briefing with the PRC, while waiting for my DR Congo visa I was able to meet with 19 stakeholders who came across the border from Uvira over three days. When the visa became available I crossed the border into DR Congo and visited Uvira for two days to experience at first hand the environment that the project has been working in and see some of its results on the ground. Following this, I visited Kinshasa and met with WWF national office, UNDP Country Office and Government representatives from the Project Management Committee. I then returned to Bujumbura for a further two days to debrief, consolidate the data and information gathered and plan the second mission. On my journey home I was able to meet with the UNDP RTA during a stopover in Johannesburg.

The Second Mission commenced on Tuesday 09 April 2013 in Dar es-Salaam where consultation meetings were held with Government and UNDP stakeholders. This was followed by a few days visit to Kigoma which is another major site for the project. Local Government stakeholders, the PMU, the Tanzanian NCU and other implementation partners were met and consulted. Site visits were made to locations where the project has conducted activities.

A brief visit was then made to Lusaka (on 16-17 April) to obtain an update on the TE carried out in Zambia last year, in particular the implementation of the Management Response to the recommendations.

The mission ended in Bujumbura where I held discussions with government and local authority officials, community leaders and an NGO. I also visited the site of project activities under the Burundi Component in Buyenzi and met with representatives of KEOC, who were entrusted with the wastewater reticulation component of the project. I then consolidated my notes and data and prepared and delivered my Preliminary Findings on 23 April 2013. The mission ended the next day.

The draft report was delivered on 20 May in English and translated into French by 28 May. It was then released for comments which were invited until 14 June. Comments were received from 13 individuals and organizations and all were taken into account fully in the production of the final version of the Terminal Evaluation Report which was delivered on 28 June 2013.

A detailed schedule and time line for the entire evaluation assignment is in Annex 3.

### **1.2.3 Evaluation objectives**

According to the ToRs, the evaluation objectives are:

- to assess the achievement of project results, and
- to draw lessons that can both improve the sustainability of benefits from this project, and aid in the overall enhancement of UNDP programming

To these could be added other objectives of the evaluator, such as:

- To provide a basis for decisions by UNDP, the Governments and the LTA on future projects with a focus on the Lake Tanganyika SAP
- To identify the issues that will need to be considered in making those decisions

## 1.2.4 Evaluation criteria, performance standards and questions

The evaluation assessed project performance against the following criteria and standards and sought answers to the questions<sup>8</sup> in the following table:

**Table 1. Evaluation scope and dimensions**

CRITERIA	DESCRIPTORS	QUESTIONS
Relevance	Project design as a tool to address identified threats and barriers	<ul style="list-style-type: none"> <li>Does the project reflect the needs of the four riparian states and Lake Tanganyika?</li> </ul>
	Alignment of project with GEF global priorities	<ul style="list-style-type: none"> <li>Is the project in line with the relevant GEF Operational Programme and strategic priorities?</li> </ul>
Efficiency	Managerial efficiency (execution)	<ul style="list-style-type: none"> <li>Has the project been implemented within deadlines, costs estimates?</li> <li>Have UNDP, UNOPS and other partners taken prompt actions to solve implementation issues?</li> <li>Did the project implementation place an undue burden on some partners?</li> <li>Have the Risks been avoided or mitigated?</li> </ul>
	Programmatic efficiency (implementation)	<ul style="list-style-type: none"> <li>Were the project resources focused on the set of activities that were expected to produce significant results?</li> <li>Was monitoring and backstopping by UNDP adequate?</li> </ul>
	Issues at implementation and corrective action	<ul style="list-style-type: none"> <li>What issues emerged during implementation?</li> <li>What were the corrective measures that were adopted?</li> </ul>
Effectiveness and Impact	Progress towards the project Objective and Outcomes	<ul style="list-style-type: none"> <li>Did the project implementation across all its activities contribute to progress toward the stated Outcomes and Objective, for the Regional as well as the four country level components?</li> </ul>
Sustainability	Design for sustainability	<ul style="list-style-type: none"> <li>Were interventions designed to have sustainable results given the identifiable risks and did they include an exit strategy?</li> </ul>
	Sustainability strategy	<ul style="list-style-type: none"> <li>Have the heirs to the project been identified and prepared?</li> </ul>
	Up-scaling of pilot initiatives and replication	<ul style="list-style-type: none"> <li>Was a plan for up-scaling and replicating of pilot initiatives, if successful, prepared?</li> </ul>

According to GEF guidance<sup>9</sup>, when rating the project's outcomes, *relevance* and *effectiveness* were considered as critical criteria – satisfactory performance on relevance and effectiveness was essential to satisfactory performance overall. This means that the overall project rating could not be higher than the lowest rating on relevance and effectiveness.

<sup>8</sup> Taken from the Evaluation Matrix which is in Annex 4 and which was prepared at the commencement of the contract and delivered as part of the TE Inception Report.

<sup>9</sup> Global Environment Facility Evaluation Office (2008) *Guidelines for GEF Agencies in Conducting Terminal Evaluations*. Evaluation Document No.3.

## 1.3 Approach and Methodology

### 1.3.1 The basis for evaluation

The basis for a terminal evaluation is the ProDoc which is the signed contract for delivery of certain agreed results, products and services. Signatories bind themselves through the ProDoc and are accountable on that basis. As noted by GEF, *“the results framework included in the project appraisal document submitted to the GEF for approval/endorsement by the CEO establishes project outcome expectations. At the time of project completion, these ex-ante expectations generally form a yard stick for assessment of outcome achievements.”*<sup>10</sup> In particular, the Logical Framework Matrix (LogFrame) or Strategic Results Framework captures the essence of the ProDoc and the project.

As discussed further below, the LogFrame for this project was weak and incomplete and in spite of attempts by the implementers to overcome this through revisions and the PIRs, the assessment of progress towards the Outcomes by this evaluation was challenging.

### 1.3.2 The approach adopted

The evaluation process comprised three phases. The first phase was one of data and information gathering. It started with a review of relevant documents made available electronically by UNDP and the Project Coordination Unit. In addition, relevant websites were also visited and studied. Soon after my arrival in-country, I received extensive briefings and additional documentation. Following this, I embarked on a broad programme of consultations with key stakeholders including at the local level around the main project locations. The aim was to capture as broad a catchment of views and opinions as possible within the time available.

The second phase focused on analysis, discussion and drafting. This phase started with the presentation of Preliminary Findings to key stakeholders as available. Following the end of the second mission, the work continued from home base and this phase concluded with the production of a draft version of the report which was forwarded to UNDP, UNOPS and the PCU to be released for comments. It was distributed widely and 13 sets of submissions/comments were received.

The third and final phase refined the draft in the light of the comments received, and produced this final report. Information provided in the comments received was used substantially in revising the draft and where there was a difference of opinion between the comment and the original text, this has been acknowledged in a footnote.

Guidance provided by GEF and UNDP, was adhered to in undertaking this terminal evaluation. As noted in the Acknowledgements, the evaluator benefited greatly from the wide spectrum of views, opinions and advice that he received during the course of his work.

### 1.3.3 Data collection

Two basic tools were used in the search for primary data and information – firstly documents review, secondly face-to-face consultations. Face-to-face meetings were the preferred method of consultation and were carried out with a wide catchment of stakeholders. Triangulation was used to ensure that empirical evidence collected from one source, for example documentation such as reports, was validated from other sources, for example through interviews. If the information was not available in document form but only from consultations, the evaluator sought to corroborate opinions expressed and information given, by posing the same questions to more than one

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<sup>10</sup> GEF Evaluation Office (2009) *Annual Performance Report 2008*. GEF Council Paper GEF/ME/C.35/Inf. 5, May 28, 2009

consultee. Anecdotal evidence was taken into account only if in the judgment of the evaluator the information was important and the source was considered reliable. In such cases, the possible limitations of this information have been noted.

The Terms of Reference provided the usual initial list of documents for review, and the response to the evaluator's request for additional documents was in most cases swift by both UNDP and the various PMUs. References to documentation are noted in this report, in most cases in footnotes. The full list of documents reviewed and/or consulted is in Annex 5 which also contains a short list of the websites that were visited and reviewed.

Some 150 persons were met and consulted in all. The scope of consultations ranged from UNDP and project management personnel (20%), partner agencies (18%), Central Governments and LTA (12%), Local Governments (17%), and to various beneficiary communities and individual farmers (33%). The TE extended to each of the four riparian countries namely, Burundi, DR Congo, Tanzania and Zambia and included meetings outside the Tanganyika region in Nairobi, and Johannesburg. In DR Congo and Tanzania I was joined by the national consultant who was carrying out the country level evaluation. In each country the major focus of lake catchment investigations was at the village level, for example Mpulungu in Zambia, Uvira in DR Congo, Kigoma in Tanzania and Buyenzi in Burundi.

Interview protocols were described in the Evaluation Inception Report and most meetings followed the same pattern, namely, a brief introduction on the purpose of the mission followed by an identification of the relationship that the consultee had with the project, if any, and his/her views on the project. Particular emphasis was placed on whether the consultee felt that the project had achieved its Objectives, whether it had done this effectively and as required, and whether the project's products and benefits were likely to be sustainable (= the basic evaluation questions). The evaluator gave an undertaking that the sources of information will not be disclosed unless this was important for the report and in such cases, only with the agreement of the source.

The approach adopted did not rely on sampling and all who could be interviewed and wished to be interviewed were interviewed. The methodology was confirmed as culturally sensitive and appropriate by PMU personnel and the reliability of the information received is not in question. The spread of interviewees, across genders and circumstances, served to enhance the validity of the information obtained.

A full list of persons met and consulted by the evaluator is to be found in Annex 6.

### **1.3.4 Stakeholders' engagement in the evaluation**

The approach adopted was participatory and inclusive and it was based on an effective dialogue with stakeholders particularly those implementing the project and those benefiting from the project. Templates designed specifically by the evaluator were provided to Project Managers and other involved in project governance and/or implementation, with guidance on how they were to be completed. They covered aspects such as budgets and financial management, monitoring and adaptive management, implementation of responses to MTE recommendations, and self-assessment of progress towards the project Outcomes and targets.

A similar approach was adopted to establish a dialogue with key stakeholders such as central government agencies, WWF, ICRAF, IUCN, UNOPS, UNDP, etc.

Furthermore, Project Managers and other members of implementation units were invited to accompany the evaluator in all his consultation meetings. In doing so, they were advised that they needed to use their judgement and decide when they needed to remove themselves if they felt that their presence was hampering the responses from stakeholders.

The above and other efforts aimed to make this a shared exercise rather than one imposed from outside the project. However, while the data gathering was carried out in a participatory manner, the analysis and the conclusions reached and the recommendations made, represent the independent views of the evaluator alone.

### **1.3.5 Evaluation boundaries and limitations**

This was a complex project by four riparian countries which, while sharing the common lake environment, were very distinct politically and socio-economically. There was one PCU and four PMUs, and in effect there were four different Executing Agencies, one of them under sub-contract. The evaluation was carried out in the concluding weeks of the project with components being at different stages of completion. Three components (Zambia, Tanzania and DR Congo) were the subject of a discrete country level terminal evaluation. All this created somewhat fuzzy boundaries and led to some challenges.

In addition to the usual constraints of time and money, the evaluation had to cope with two languages, remote project localities and difficult access in parts. There was also a substantial amount of travel required to cover the whole region.

However, while posing challenges, these difficulties were overcome and did not constitute limitations on the evaluation. Working hours were extended with meetings and site visits taking place throughout the weekend; travelling between countries was done mostly at night; foot access was employed where it was not possible to drive; interpretation was provided by a francophone partner evaluator.

One possible limitation which may have affected the francophone stakeholders, was the quality of the translation into French of the draft report – this was even noted in comments.

This Terminal Evaluation exercise was characterized by on-going work in two of the five components, which were the subjects of extensions at no cost to the GEF. This resulted in the evaluator continuing to receive updates, including documentation, well after the data gathering phase of the evaluation. It is not usual for documents and additional information to continue to be provided and taken into account after the draft report has been produced (in this case, 20 May 2013), however, additional information and updates were accepted as long as they were anchored to the draft report.

One final hurdle that the evaluation had to overcome was created by the out-of-date nature of some of the documentation provided. This included such key documents as the ProDoc and PIRs and posed a serious challenge for the evaluator as some report components had to be rewritten when the up-to-date documentation was provided.

### **1.3.6 Data analysis**

The information and data obtained was first recorded as it arose and then collated according to the major divisions of this report which reflect the evaluation questions. The discussion which followed encompassed the range of opinion obtained and the consensus recorded, if any. Conclusions were then drawn on factual evidence and/or the balance of opinion in the search for answers to the evaluation questions. Often, preliminary assessments were shared with stakeholders in an attempt to confirm the accuracy of data and the results. This was particularly so in the presentation of Preliminary Findings at the end of the second mission. As this took place in front of a limited number of stakeholders, the presentation was distributed widely and comments invited and received.

The draft report was translated into French and both versions were distributed widely with an invitation for comments over a two week period. All the comments were analysed and this final report was produced taking into account all the comments received.

It should be noted that while some challenges were noted above ranging from project design to logistics, the evaluator is confident that these did not influence in any significant way the ultimate information that was obtained, the analysis carried out and the findings obtained.

### 1.3.7 The rating system

GEF guidance requires certain project aspects to be addressed by a terminal evaluation and a commentary, analysis and rating is required for each of:

- Project concept and design
- Stakeholder participation in project formulation
- Implementation approach
- Monitoring and evaluation
- Stakeholder participation
- Attainment of Outcomes and achievement of Objective

These aspects, which form the framework of the core sections of this report, are augmented as considered necessary to also address issues that arose during the evaluation.

Each of the aspects has been rated separately with brief justifications based on findings. In addition, various other project elements have also been rated, as has the project as a whole.

The standard GEF rating system was applied, namely:

**Highly Satisfactory (HS):** The project has no shortcomings in the achievement of its objectives, in terms of relevance, effectiveness or efficiency

**Satisfactory (S):** The project has minor shortcomings

**Moderately Satisfactory (MS):** The project has moderate shortcomings

**Moderately Unsatisfactory (MU):** The project has significant shortcomings

**Unsatisfactory (U):** The project has major shortcomings

**Highly Unsatisfactory (HU):** The project has severe shortcomings

The rating of various elements of the project is necessarily subjective but it is carried out according to GEF guidance and ethics, and based on the experience of the evaluator. A score of Highly Satisfactory is not common (around 4%)<sup>11</sup> since it can only be applied in situations which are exceptional and where no improvement is possible. At the other end of the scale, a score of Highly Unsatisfactory (HU) is also not common (1%) and the greater part of projects and project elements are rated in the Satisfactory (S) to Moderately Satisfactory (MU) quartile (76%).

## 1.4 Structure of this report

The evaluator made an effort to keep this report brief, to the point and easy to understand. It is made up of four substantive parts guided by the structure and scope in the ToRs (Annex 1) which reflect GEF generic guidance<sup>12</sup> and is according to the standards established by UNEG<sup>13</sup>.

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<sup>11</sup> GEF Evaluation Office (2009) *Annual Performance Report 2008*. GEF Council Paper GEF/ME/C.35/Inf. 5, May 28, 2009

<sup>12</sup> Global Environment Facility Evaluation Office (2008) *Guidelines for GEF Agencies in Conducting Terminal Evaluations*. Evaluation Document No.3.

<sup>13</sup> UNEG United Nations Evaluation Group (2005) *Standards for Evaluation in the UN System*.

Following the executive summary that encapsulates the essence of the information contained in the report, the first part provides the introduction and the background to the assignment. It starts with the purpose of the evaluation, exactly what was evaluated and the methods used. This is followed by a brief introduction to the project.

The next part is the main substantive part of this report and comprises four inter-related sections. It presents the findings of the evaluation exercise in terms of the basic project concept and design, its implementation, administration and management, its achievements, results and impacts, and the potential for sustainability of the products and services that it produced. The findings are based on factual evidence obtained by the evaluator through document reviews and consultations with stakeholders and beneficiaries.

The third part is the conclusions section which gathers together a summary of the ratings given and conclusions that had been reached throughout the rest of the report and augments them to create a cohesive ending arising from the investigation. This section in turn leads to the final section comprising the recommendations.

A number of annexes provide supplementary information.

## **2 PROJECT DESCRIPTION AND DEVELOPMENT CONTEXT**

### **2.1 The project that is being evaluated**

The UNDP/GEF *Project on Partnership Interventions for the Implementation of the Strategic Action Programme for Lake Tanganyika* comprises five components – a Regional, Burundi, DR Congo, Tanzania and Zambia Components. Project execution for the Regional, Burundi and DR Congo components of the UNDP/GEF Project was the responsibility of UNOPS (through its International Waters Cluster). In accordance with UNDP and UNOPS operational and financial guidelines and procedures, UNOPS was accountable to UNDP for the delivery of agreed outputs as per agreed project work plans, for financial management, and for ensuring cost-effectiveness. The Tanzanian and Zambian Components were executed by the governments of Tanzania and Zambia, respectively (National Execution, NEX).

The project was implemented in close collaboration with the Lake Tanganyika Authority (LTA), the four governments and a wide range of national and international partners and stakeholders. It comprised one of two related components which make up the Lake Tanganyika Regional Integrated Management and Development Programme (LTRIMDP). The other component is the African Development Bank / Nordic Development Fund supported *Project to Support the Lake Tanganyika Integrated Regional Development Programme* (PRODAP), which runs in parallel with the UNDP/GEF Project. The PRODAP, which is coordinated by the LTA, focuses on addressing topics of unsustainable fisheries and pollution as well as on overall development activities.

In order to address major transboundary issues for sustainable management of the natural resources in the Lake Tanganyika the following interventions were developed within the framework of the broader LTRIMDP:

- Support to the Lake Tanganyika Authority (LTA) and its Secretariat to coordinate and monitor sustainable management of the lake. (UNDP/GEF Project)
- Pollution control through wastewater management in Bujumbura (Burundi) and Kigoma (Tanzania). (UNDP/GEF Project and PRODAP)

- Sedimentation control through catchment management interventions in the regions of Uvira (DRC), Kigoma, Katavi and Rukwa (Tanzania), and Mpulungu and Kaputa (Zambia). (UNDP/GEF Project and PRODAP)
- Introduction of sustainable and responsible fishery co-management regimes. (PRODAP)
- Institutional support to policy process, implementation of the Convention on Sustainable Management of Lake Tanganyika, and the establishment and implementation of environmental monitoring programmes. (UNDP/GEF Project)

Preparation of the LTRIMDP began in 1992 with the FAO/FINNIDA funded research for the Management of the Fisheries on Lake Tanganyika Research (LTR), during which a Framework Fisheries Management Plan (FFMP) was developed for the lake. In 1995, upon the completion of its preparatory phase (PDF A), the Project on Pollution Control and Other Measures to Protect Biodiversity in Lake Tanganyika (LTBP) started. This was implemented by UNDP and executed by UNOPS with the financial support of GEF. The LTBP implemented a series of Special Studies as well as several management planning meetings involving national and regional stakeholders. The results of the LTBP fed into the development of a Transboundary Diagnostic Analysis (TDA) and a Strategic Action Programme (SAP), which was adopted by the four governments in 2000.

From 2000 until 2004, the GEF-funded (PDF B) Lake Tanganyika Management Planning Project (LTMP) resulted in the elaboration of regional and national project proposals for the implementation of the SAP as well as the finalization of the Convention on Sustainable Management of Lake Tanganyika. Ratification of the convention by the governments of Burundi, DR Congo, Tanzania and Zambia took place in November 2008. The Convention provides for the LTA management structure to coordinate activities focusing on the conservation of biological diversity and sustainable management of the natural resources in the Lake Tanganyika basin, and forms the basis for implementation of the projects under the LTRIMDP.

The PRODAP and UNDP/GEF projects both started in 2008, with the establishment of the LTA Secretariat headquarters office in Bujumbura, Burundi. As described in the UNDP/GEF Project Document, the long-term objective of the overall LTRIMDP is improvement of the living conditions of the riparian populations through the implementation of the SAP, the FFMP and the Convention, together with ongoing and future efforts of riparian countries to bring about integrated sustainable management and protection of Lake Tanganyika.

At the policy and strategic level the project was guided by the LTA Management Committee, which functioned as the Project Steering Committee (PSC). The PSC met annually to monitor progress in project implementation, provide strategic and policy guidance, and review and approve work plans and budgets. The PSC is discussed further in section 4.1.

A Project Coordination Unit (PCU), headed by the Project Regional Coordinator (PRC), was responsible for day-to-day management of the implementation of the regional component and formed an integrated part of the LTA Secretariat, which was located in Bujumbura, Burundi – it is discussed in further detail in section 4.2. UNDP-GEF (through its Regional Coordination Unit for Africa, located in Pretoria) was the lead office for overall project implementation. At the national level, project implementation was conducted by Project Management Units (PMUs). In Burundi, the PMU fell under the responsibility of the PCU. The PMU in DR Congo fell under the responsibility of the PCU through the WWF which was subcontracted as an implementing partner by UNOPS for the DR Congo Component. In Tanzania, the PMU reported to the Vice President's Office (VPO) and the UNDP Country Office in Tanzania. The PMU in Zambia reported to the Ministry for Lands, Natural Resources and Environmental Protection as well as to the UNDP Country Office in Zambia.

Funding for the overall LTRIMDP as described in the Project Document reached a total of just over US\$60 million. The UNDP/GEF project was granted US\$13.5 million by GEF. It commenced in 2008 and was planned to run for four years. However, in practice there were delays and different components started at different times and extensions were sought and granted as in the following table.



**Table 2. Milestones and status of the components (as at the end of June 2013)**

COMPONENT	FIRST DISBURSE OR OTHER INDICATION OF START	INCEPTION WORKSHOP	STATUS	BUDGETARY IMPLICATIONS OF EXTENSIONS
Regional	October 2008	August 2009	First extended by one year to end of May 2013 to reflect extensions to country components. Then due to close end of June 2013 but extended further until end of August 2013 to reflect further extensions of other components	No cost to GEF
Burundi	June 2010	November 2010	Having started two years late, first extended by one year - planned to close end of May 2013. Further extension agreed to end of July 2013 to complete Buyenzi sewer works. Total duration will be 3 years 1 month	No cost to GEF
DR Congo	July 2010	November 2010	Having started two years late, extended by seven months to March 2013. Total duration was 2 years 9 months	No cost to GEF. WWF co-financed (USD7,075) project closure activities
Tanzania	November 2008	January 2009	First extended by one year to end of April 2013. GEF funded component planned to close end of May 2013. Further extension advised, but end date unknown	No cost to GEF. UNDP TRAC funds will support the further extension
Zambia	October 2008	April 2009	GEF funded component closed end of August 2012. Extended firstly by 6 months to February 2013; extended further through UNDP follow-up project	No cost to GEF. UNDP TRAC funds (USD640,000) supported the extension as per TE recommendation

It must be noted that the evaluator does not have full confidence in the above dates since the information available is conflicting. For example, the date of first disbursement in PIR2010 is given as October 2008, in PIR 2011 it is given as "prior to July 2009", and it does not appear at all in PIR2012.

## 2.2 Socio-political and economic context

Lake Tanganyika is the deepest lake in Africa and holds the greatest volume of fresh water. It extends for 676km in a general north-south direction and averages 50km in width. The lake covers 32,900km<sup>2</sup>, with a shoreline of 1,828km and a mean depth of 570m and a maximum depth of 1,470m it holds an estimated 18,900km<sup>3</sup> of water. It has an average surface temperature of 25°C and a pH averaging 8.4.

The catchment area of the lake covers 231,000km<sup>2</sup>, with two main rivers, the Ruzizi River entering in the north and the Malagarasi River which enters on the east. It has one major outflow, the Lukuga River, which empties into the Congo River drainage.

The socio-economic context for the project is best summarized by the updated Strategic Action Programme (SAP) of 2012, which says: "Life expectancy in the riparian nations averages 46-57 years. Population growth rates in the basin are among the highest in the world, ranging from 2.0-3.2% per year, and it is expected that the number of people who either directly or indirectly depend on the natural resources in the basin will increase significantly in the near future. The population in the Lake Tanganyika basin is estimated to be between 12.5 and 13 million. Literacy rates range

from 45-76%. Per capita income ranges from US\$ 300-1,500 per year. Proportions of the population earning less than US\$1 per day and living below national poverty lines range from 36-71% (ADB, 2004).” These sobering statistics are borne out by the Human Development Report of 2011 which recognizes the four riparian nations sharing the Lake Tanganyika basin as among the poorest in the world, and states that the “Democratic Republic of the Congo, Niger and Burundi are at the bottom of the Human Development Report’s annual rankings of national achievement in health, education and income.”

Approximately 13 million people live in the catchment area, representing a diverse ethnic group of predominantly Bantu origins. Swahili is an official language for Tanzania, and is common in Burundi, DR Congo and Zambia in the lake region. It is the language of commerce and communications throughout Lake Tanganyika. However, Tanzania and Zambia are historically anglophone states, and share different legal traditions from the historically francophone Burundi and the DR Congo.

The main economic activity is agriculture and the main agricultural products include maize, tobacco, rice, sugarcane, coffee, beans, groundnuts, cassava, cattle and goats. Processing of these products, as well as mining, are the main industries in the lake’s basin.

As well as being an important source of income for many in the area, Lake Tanganyika is the “highway” that links the riparian towns of the four nations, since most areas lack sufficient infrastructure for land transportation. Population movements and their repercussions on society due to civil unrest have influenced relationships between the riparian nations, particularly in the northern parts of the basin.

## 2.3 Problems that the project sought to address

According to the ProDoc, “The TDA identified the major trans-boundary threats confronting the four countries in their efforts to manage the Lake and its Basin as: unsustainable fisheries, increasing pollution, excessive sedimentation and habitat destruction.” The UNDP/GEF project noted that the problems of fisheries and habitat destruction were being addressed directly by the PRODAP and other initiatives and focussed on:

- Pollution control through wastewater management in the cities of Bujumbura (Burundi) and Kigoma (Tanzania)
- Sedimentation control through catchment management interventions in the areas of Uvira (DRC), Kigoma (Tanzania) and Mpulungu (Zambia)
- Institutional support to policy processes, Convention implementation and monitoring programmes

## 2.4 Expected results

The results expected from the project are best illustrated by the original wording of the Objective and Outcomes as in the following table which is taken from the ProDoc.

**Table 3. Project results expected according to the original LogFrame**

OBJECTIVE AND OUTCOMES	EXPECTED RESULTS	SALIENT OUTPUTS EXPECTED	OPERATIVE COMPONENT
<b>Immediate Objective:</b> To implement the prioritised activities of the Strategic Action Programme so as to achieve sustainable management of the environmental resources of Lake Tanganyika	Implementation of SAP priorities leading to sustainable management of	-	All components

	environmental resources		
<b>Outcome 1:</b> Regional and national institutions have internalized the implementation of the SAP and FFMP and provide institutional support for the cooperative management of Lake Tanganyika under the ratified Convention.	Internalization of SAP; support for cooperative management	<ul style="list-style-type: none"> <li>• Lake Tanganyika Secretariat established under Lake Tanganyika Authority</li> <li>• Protocols to Lake Tanganyika Convention</li> <li>• Revised SAP</li> <li>• NAPs for each of the four countries</li> </ul>	Regional Component
<b>Outcome 2.</b> The quality of the water of Lake Tanganyika is improved at two identified pollution hotspots through wastewater treatment.	Improvement of water quality at Kigoma and Bujumbura coastline	<ul style="list-style-type: none"> <li>• Reduce raw sewage discharge to the lake from Bujumbura City</li> <li>• Management capacity for Kigoma Wastewater Treatment Plant</li> </ul>	Tanzania and Burundi Components
<b>Outcome 3:</b> Sediment discharge reduced from demonstration catchment management sites; providing significant livelihood benefits to local people, and seeking long-term adaptation measures to changing climatic regimes.	Sediment load reduction; livelihood benefits; adaptation to changing climate	<ul style="list-style-type: none"> <li>• Demonstration sites for sustainable catchment management established in Kigoma, Uvira and Mpulungu</li> <li>• Fuel efficient technologies</li> <li>• Alternative income generation activities</li> </ul>	Tanzania, Zambia, DRC Components
<b>Outcome 4:</b> Regional monitoring and management systems contribute to the long-term sustainable management of Lake Tanganyika.	Monitoring and management systems at regional level	<ul style="list-style-type: none"> <li>• Regionally harmonized and integrated monitoring program for fisheries, water quality and catchment</li> <li>• National inter-sectoral management committees</li> <li>• Regional technical committees for fisheries, water quality and catchment</li> </ul>	Regional Component

The LogFrame (= Results Framework) is assessed as part of project design in section 3.3 below. The assumptions inherent in these expected results together with the risks involved are discussed below in section 3.5.

## 2.5 Baseline – departure points

From the documentation reviewed, it would seem that the project did not have meaningful Baselines at the outset. Neither the TDA, nor the main ProDoc, or the Tanzania or Zambia ProDocs provide Baselines<sup>14</sup>. This is in spite of the fact that the assessment of progress towards two of the Outcomes depends entirely on baselines. For example, Outcome 2 targets the “quality of the water of Lake Tanganyika is improved” and Outcome 3 targets “sediment discharge reduced”. In order to be able to determine improvement and reduction, it is necessary to know the departure point, the Baselines – and these are not available explicitly.

It is a GEF requirement that if major baseline indicators are not identified in project design, an alternative plan for addressing this is required within one year of the start of implementation. This is discussed further in section 4.5. In the Zambia Component, there was an attempt by the project to overcome the lack of Baselines by commissioning a consultancy. However, as the TE observed, “*The baseline report focuses on socio-economic parameters and there is little if any baseline of a technical nature.*” In the Tanzania Component, many of the targets in the ProDoc involve percentage increases and/or improvements, but there is no indication of the current status situation.

<sup>14</sup> However, it is accepted that the ProDoc for the Burundi Component did provide readings for pH, Dissolved Oxygen (DO), Chemical Oxygen Demand (COD), Chlorine and Total Dissolved Solids at two lakeside locations but these can hardly be seen as constituting a baseline. It is also acknowledged that Zambia Component started measuring sediment load early in the project.

The VPO confirmed the absence of baselines but noted that the outcomes targeted were derived from the previous work which developed the SAP. In the Burundi Component, the Inception Report has some baseline data under the discussion of M&E but these do not establish the actual physical level from which the project is starting.

It is noted that PIR2010 (the first PIR for the project) made an attempt at determining baselines and these are discussed at some length in section 3.3 below where the LogFrame is analyzed.

## **2.6 Main stakeholders**

According to the ProDoc, the key stakeholders for the Regional Component included the four Governments at various levels (central and local) and involving the sectors of Environment/Natural Resources, Fisheries, Finance, Land, Water, etc. Local communities, public agencies, NGOs and CBOs were also considered as key stakeholders. Furthermore, there were stakeholders from the various implementation and financing partners, the donor community and the private sector. Finally, the ProDoc also identified universities and research institutions as stakeholders.

Stakeholder participation was a key and successful ingredient for the production of the TDA, the SAP, the FFMP, the Convention and the development of this project proposal through the PDF-B phase activities. At national level, communities were consulted through discussions at sub-district level for catchment management components (according to one community member from Uvira, *the project went up to the highlands – no one else does!*, and according to another – *the project respected communities, formed them into cooperatives, gave them ownership*).

At regional level, Countries and Partners came together at Regional Steering Committee meetings which confirmed progress and made decisions on project content, etc. An early Steering Committee meeting in Lusaka, Zambia, approved the overall content of the project components, and the modality of execution (*i.e.* NEX in Tanzania and Zambia, and UNOPS Agency Execution for DRC and Burundi and the Regional Component).

The UNDP Country Offices in Tanzania and Zambia also hosted LPAC meetings to agree on implementation processes in those countries and the recommendations / conclusions of these meetings were encapsulated in the respective Country Component ProDocs.

## **3 FINDINGS: PROJECT DESIGN – RELEVANCE**

### **3.1 Project concept and design**

The project concept was straightforward and in recognition of the threat to biodiversity posed by sediment input and wastewater discharges into the lake and that weak institutions and lack of coordination between the riparian states constituted key barriers. In its efforts to address the barriers, the project employed the same successful model as had been applied elsewhere in GEF International Waters projects namely, assisting the governments to set up a regional entity and drafting a convention and protocols as mechanisms for cooperation on the management of the shared resources of Lake Tanganyika. It also addressed the threats more directly – piloting better farming practices and protecting land cover so as to reduce the sediment load reaching rivers in Zambia, DR Congo and Tanzania, and dealing with wastewater discharges in Tanzania and Burundi.

The project worked at a pilot scale on the assumption that having tested and proved new approaches and modalities, these would then be upscaled and replicated by the governments.

The underlying concept was sound and uncomplicated and the budget appears adequate for pilot scale work. The four-year timeframe may have been too short particularly in view of the fact that two out of the four countries were faced with post-conflict challenges – in both Burundi and DR Congo, the project started well after that in the other two states.

While the project concept was sound, the design was not entirely so, and neither were the instruments through which it was to be implemented – *i.e.* the ProDocs<sup>15</sup> which were weak in some essential components such as the LogFrame, Indicators, Risk Management, Baselines and Targets. Also missing was any strategic consideration of upscaling, replication and sustainability, and for a project operating on a pilot scale this was a significant omission. The wording used in the Outcomes was over-ambitious and not appropriate for a foundational project dealing with pilot scale work over a short four year timeframe.

A further flaw in project design was the total reliance (*'intimately integrated'* according to the ProDoc) of this project on another project for the achievement of one of its outcomes – the reduction in point sources of pollution from industrial and domestic wastewater, without a risk management strategy<sup>16</sup>. The setting up of wastewater treatment facilities in Kigoma was a prerequisite for the UNDP/GEF project which did not eventuate thus negating the value and benefits of this project.

One further weakness in project design was the apparent lack of provision for collaboration, exchange and mutual learning at the technical and community levels. While this did take place at the political and high decision-making levels, and (although to a lesser extent) at the level of the respective Project Managers, the project did not facilitate communication at the technical levels, such as in water quality sampling or at the community level such as on cultivation and farming methodology.<sup>17</sup>

Project design is rated as **Moderately Satisfactory (MS)**.

### 3.2 Relevance to the Region and to each of the countries

Relevance, according to the OECD<sup>18</sup> is a measure of the extent to which the objective and outcomes of a project are consistent with “*beneficiaries’ requirements, country needs, global priorities and partners’ and donors’ policies.*” In other words, does the project address the identified threats and barriers? Is it bedded within the UNDP Country Programme? Does it contribute to the GEF global objectives?

The institutional work at the LTA level, the cultivation work in the catchments, and the wastewater work carried out by the project were all highly relevant to the needs of the region and the needs of the four countries. This was to be expected since the project arose out of the long and thorough process of the Transboundary Diagnostic Analysis which led to the Strategic Action Programme which in turn spawned the project.

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<sup>15</sup> In effect there were three Project Documents and three executing agencies – UNOPS for the Regional Component, DR Congo and the Burundi Components, Government of Tanzania for Tanzania Component and Government of Zambia for Zambia Component.

<sup>16</sup> UNDP notes that as a co-financing strategy this was a good one, and the evaluator agrees – the design flaw is the lack of a risk management strategy.

<sup>17</sup> The project work carried out by farmers in the steep catchments around Mpulungu, Kigoma and Uvira to reduce sediment input was virtually identical yet they were not provided with any opportunities to meet, exchange views and experiences and learn from each other.

<sup>18</sup> DAC Working Party on Aid Evaluation (2002) *Glossary of Key Terms in Evaluation and Results Based Management*. OECD, Paris.

The project is also seeking global benefits as targeted by the GEF which, under OP#9 sought the integration of sound land and water resource management strategies through changes in sectoral policies and activities that promote sustainable development

More specifically, and at country level .....

In **Burundi**, around the time that the project was nearing its formulation phase, the PRSP<sup>19</sup> for Burundi stated that *“Strong demographic growth has already led to environmental degradation. The adaptation of productive systems to demographic pressures and emerging needs is taking place at the expense of fallow land, pasture land, and woodlands. Consequently, excessive pressure is being exerted on natural resources, leading to the degradation of soil and pasture land, increased deforestation, and the disturbance of ecosystems such as wetlands.”* Yet soon after, and in the face of high demands by other sectors for the government’s attention, the UNDP<sup>20</sup> was able to report attention to *“... environmental protection and natural disaster reduction, increased awareness and commitment from the highest authorities in the country on a sound environmental management, prevention and management of natural disasters.”*

Although competing with other sectors for priority, the project was very relevant to the needs of Burundi even though ownership was dented somewhat by the fact that UNOPS was engaged as the Executing Agency instead of using the NEX modality<sup>21</sup>. According to government officials spoken to by the evaluator this was the reason for the reluctance of Burundi officials to participate meaningfully in the Project Steering Committee.<sup>22</sup>

**DR Congo** documentation from UNDP and UNCT from the time when the project was being formulated<sup>23</sup> shows a correct bias towards restoring peace and stability, enhancing good governance, addressing poverty and combating HIV/AIDS. Environment barely gets a mention and Lake Tanganyika does not feature. On this basis, the project cannot be said to have been relevant to DR Congo and this may have contributed to its delayed operational start by two years. Furthermore, Lake Tanganyika issues in DR Congo are distant physically and in other ways from the central government in Kinshasa and the difficult security situation did not help. However, by empowering farmers in Eastern Congo, mostly widowed women, by increasing food production, and by generally improving the living conditions in and around Uvira, the project has contributed to the fight against poverty and to the restoration of peace and stability. The project was relevant to the needs in DR Congo, and as one stakeholder from Uvira said – *“the project belongs to the community”*.

In addition, through its membership in the LTA and its collaboration with its riparian neighbours facilitated by the project, DR Congo has taken up its rightful place as one of the “owners” of the shared resources of Lake Tanganyika. In spite of the physical distance between the shores of Lake Tanganyika and the seat of government in Kinshasa, government officials stressed their commitment to the project and to the Lake Tanganyika environment and the only complaint was that they felt their ownership of the project was reduced by the fact that it was not nationally executed.

In **Tanzania**, the UNDP Country Programme for 2007-2010<sup>24</sup> (covering the early years of the project) refers to the integration of Environment in the Government’s MKUKUTA for the Tanzania

<sup>19</sup> International Monetary Fund (2007) *Burundi: Poverty Reduction Strategy Paper*. IMF Country Report No. 07/46

<sup>20</sup> UNDP (2009) *Draft Country Programme Document for Burundi (2010-2014)*. Presented to the Executive Board of the United Nations Development Programme and the United Nations Population Fund.

<sup>21</sup> UNDP advised that when the project was being formulated, the Burundi government’s capacity to manage external resources was weak ... the country was not even ‘post’ conflict.

<sup>22</sup> The general opinion in project circles is that PSC members in Burundi did not participate in meetings because they felt that they should receive a sitting allowance in the same way as PRODAP PSC members did. As this was against UNDP rules, it was not possible.

<sup>23</sup> See for example - <http://www.cd.undp.org/mediafile/CPAP%20PNUD%202008-2012%20Secion%201.pdf>, and <http://www.cd.undp.org/mediafile/2009%20UNCT%20Workplan.pdf>, <http://www.cd.undp.org/mediafile/PAP%20FINAL.pdf>

<sup>24</sup> UNDP (2006) *Draft Country Programme Document for Tanzania (2007-2010)*. Presented to Second Regular Session, 2006, of the Executive Board of the United Nations Development Programme and the United Nations Population Fund.

mainland and MKUZA for Zanzibar, as a cross-cutting theme. It then reflects this in the CPD by targeting outputs such as access to renewable energy, the integration of environmental concerns into development policies and plans, the reduction of dependence of the poor on natural resources for their livelihoods, and the conservation of biodiversity – all of which are facilitated by the project. The CPD also sets up a specific Outcome which aims for the *improved community access to safe, clean water and environmental sanitation in the rural and urban areas* – the latter of these two targets is the direct aim of the project in Kigoma.

The **Zambia Component** project was in good harmony with the UNDAF for 2007-10 in which environmentally sustainable development was a crosscutting priority. It was also in harmony with the UNDP CPD for 2007-10 where one of the Outcomes was “*Sustainable management of environment and natural resources incorporated into national development frameworks and sector strategies*” and “*Capacity developed for domestication of global environment conventions that position environment protection biodiversity and land management as central target of attaining MDGs*” was one of the Outputs. It was therefore relevant to the UNDP Country Programme.

In addition, the Zambia Component project was in harmony with the Fifth (2006-2010) and Sixth (2011-2015) National Development Plans as well as very relevant to the national needs of Zambia, especially the communities in the Northern Province that live in the riparian zone of the Lake. By promoting and building capacity for sustainable land use practices, the project was not only reducing run-off and sediment load in the rivers, but it was also providing community members with a better return from their agricultural enterprises thus addressing poverty and enhancing their quality of life.

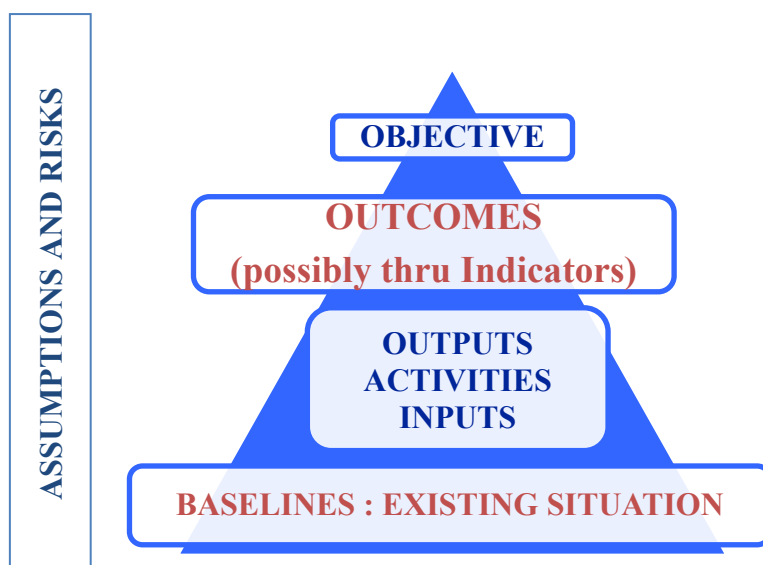
It can be concluded that the project has been highly relevant to the needs of the four states and the Lake Tanganyika environment as well as to the GEF global objectives, and relevance is rated as **Highly Satisfactory (HS)**.

### 3.3 The LogFrame/Results Framework

A project is a planned and strategic attempt to progress from the existing situation (the baseline) to the targets (outcomes) as a contribution towards the Objective. This is done through an orderly deployment of Inputs (skills and know-how, finances and time) which carry out Activities and obtain Outputs. The Outputs are not the Targets; it is the Outcomes that are the Targets. In order for the project to be successful a number of pre-conditions and Assumptions must be fulfilled and the possibility that they may not be fulfilled constitutes a Risk. While it is easy to know when Outputs have been obtained (Outputs are tangible results), in the majority of cases, it is difficult to know whether Outcomes have been achieved and Indicators may be necessary.

All these elements – Baseline, Inputs, Outputs, Targets, Outcomes, Assumptions, Risks, and Indicators – make up the Logical Framework Matrix (or Strategic Results Framework) – all the elements are essential and the LogFrame is not functional if even one is missing. The diagram below illustrates the relationship between these essential elements.

The LogFrames for this project are probably the weakest component in the ProDoc/s because they are incomplete and this has been acknowledged by many stakeholders. More specifically and as noted elsewhere, explicit Baselines are missing and Targets are also mostly missing; Indicators are feeble and do not possess SMART qualities.



In cases where the LogFrame is deficient, it is usual for a thorough analysis to be conducted during the Inception Workshop. However, none of the Inception Workshops for which reports are available, even mention the LogFrame.

These gaps and anomalies in the LogFrame/s were noted by PMs but little if anything was done about them. For example, from **Tanzania** came a document headed “*PIR/APR & Work Planning meeting 9-11 August 2010, Pretoria: LogFrame from PIR*” which lists Outputs and Activities but it is not a LogFrame. The **DR Congo** Inception Workshop produced two different reports. One of them identified the need for a Baseline Survey “*in order to get confirmed Objectives and Outcomes benchmarks*”, but it is not known what happened next. The **Burundi** Inception Workshop confirmed the Objective and Outcome and discussed Indicators as part of its M&E effort, but did not discuss the LogFrame or its shortcomings. A document provided to the evaluator records a Nairobi Meeting in December 2011 which appeared to discuss Targets but although labelled as such, it did not discuss the LogFrame. Similarly to the other components, the **Zambia** component did not have a functional LogFrame and although the PM raised the matter at the First PSC Meeting (May 2009), it took almost two years before the LogFrame was mentioned again at a PSC Meeting when the PM “*presented the updated logical framework for the UNDP GEF LTIMP Zambia component. After deliberations and clarifications, the NPSC approved and adopted the updated project log frame.*” For something as important as the LogFrame, this entry in the PSC meeting minutes does not do it justice. From the **Regional** PCU the evaluator received a document labelled *Logical Framework and Results Measurement template 2009-10* and described as a *SMART Indicator-based M&E Framework used by the PMUs, PCU and LTA Secretariat*. Unfortunately, the Indicators do not satisfy the SMART requirements and the document is not a LogFrame.

To the evaluator, the above betrays a general lack of understanding and appreciation of the use and value of the LogFrame.

Apart from being a graphic and visual summary of the project, the LogFrame should also be an effective tool for project managers and those monitoring and evaluating its progress. A weak or incomplete LogFrame needs to be rectified. Even a fully functional LogFrame needs to remain as a



“living” document and may need to change with changing circumstances and the passage of time. An evolving LogFrame provides the foundation for adaptive management. The conclusion drawn is that none of the components of this project had a functional LogFrame and there are few if any signs of adaptive management – the rating is **Moderately Unsatisfactory (MU)**.

### 3.4 Stakeholder participation in project formulation

The project was formulated during the early 2000s and by the time it became operational and the first disbursement was made, it was 2008. This was the period when two of the four countries were occupied in reconciliation and post-conflict rebuilding. However, and in spite of this, accounts of broad stakeholder participation abound. This was particularly so in the TDA exercise and the formulation of the SAP (through GEF support) which together provided the foundation for the project. As the ProDoc states, “*Stakeholder participation was a key and successful ingredient for the achievement of the TDA, the SAP, the FFMP, the Convention and the development of the present project proposals during the execution of the PDF-B phase activities.*”

Stakeholder involvement is known to have ranged from regional (ILTMA, the precursor of the LTA) and national high level decision-makers, to communities who were consulted down to sub-district level for both catchment management and fisheries components<sup>25</sup>.

More specifically at regional level, countries and partners came together at Regional Steering Committee meetings which approved progress and made decisions on project content, etc. The Steering Committee meeting just before the project started, which was held in Lusaka, approved the overall scope of the project components, and the mode of project execution (*i.e.* NEX in Tanzania and Zambia, and UNOPS Agency Execution for DR Congo and Burundi and the Regional Component).

In terms of the NEX process, the UNDP Country Offices in Tanzania and Zambia hosted LPAC deliberations to obtain agreement on the detailed implementation processes in those countries. Recommendations / Conclusions of these LPAC meetings are contained in the country ProDocs.

Stakeholder involvement in project formulation is rated as **Satisfactory (S)**.

### 3.5 Assumptions and Risks

The ProDoc listed a number of identified risks in a table which also rated their severity and included a column headed “Abatement Measure”. These are shown in the following table which also includes an update by the PCU on whether the risk materialized and comments by the evaluator.

**Table 4. Risks and abatement measures as identified in the ProDoc and updates as reported by the PCU with comments by the evaluator**

RISK	RATING	ABATEMENT MEASURE	UPDATE BY PCU AND COMMENTS BY EVALUATOR <i>(in italics)</i>
<b>RISKS IN INSTITUTIONAL PROCESS</b> <b>(Overall Process Risk is L-M low - moderate)</b>			
1 Resurgence of insecurity in the region	M	Successful peace processes ongoing in the region, involving all countries and a donor consortium, the United Nations and the Africa Union suggest that the risk is	Burundi, Tanzania and Zambia have been generally peaceful whereas Eastern DR Congo has not been completely incident free. In the last Quarter of 2012 this

<sup>25</sup> A different perspective was expressed by one comment which stated that the project had been “top down” and therefore not as effective or sustainable.

		declining, and insecurity will at worst be localized and temporary. The project, through the Convention involves the political process, and is in itself seen as a further instrument for cooperation and peace in the Region	affected implementation and project activities in DR Congo had to be suspended.  <i>In hindsight, the risk was High rather than Moderate and the project had no mitigation measure. However, the PCU as well as PMU-DRC did develop emergency/contingency plans in case of heightened security concerns and these had to be implemented</i>
2 Reduced political willingness to continue and strengthen cooperation in the Region	L	There is strong political commitment to cooperation by the four Governments at present (ref: their declarations). The strength of donor support suggests that there will be considerable pressure to maintain cooperation in all fields – both political and technical	Political willingness to continue and strengthen cooperation in the Region has not reduced.  <i>The risk did not eventuate and the countries' commitment is evidenced by their agreement to each contribute USD300,000/year (very high level of contribution in general terms since three of them are LDCs and Zambia graduated from LDC not long ago".</i>
3 No commitment to ratify the Convention by countries of the Region.	L	Strong political commitment by the four Governments (reference their declarations over the Convention). The convention links to broader peace and cooperation processes	The countries are committed to ratification of the convention. In fact all countries had ratified the convention by 2009.  <i>The risk did not eventuate</i>
4 Reduced commitments to create and contribute financially to the Authority.	M	Governments have committed to the basic costs of the Authority – i.e. staff salaries in the second year after parliamentary approval etc. Further commitment is expected. However demonstration of financial benefits from improved lake resource utilization (levies on fisheries, licensing, study for self-financing schemes, development funds, etc) will assist in leveraging further contributions	The commitments to create and contribute financially to the Lake Tanganyika Authority have not reduced although the flow has not been completely smooth. The outlook is encouraging though as it appears that all the 4 countries will honour their commitments in 2013.  <i>Financial contributions have not been timely and no mitigation measures identified</i>
<b>RISKS IN MOVING FROM OUTPUT TO OUTCOME</b> <b>(Risk rated as L = low)</b>			
5 Wastewater schemes are not utilized adequately to reduce pollution Outcome 3.	L	The project has built in considerable investment to compliance, EIA process, by-laws and awareness to ensure proper utilization. The water / sewage authorities are assisted to collect fees to ensure sustainability.	Wastewater schemes are not utilized adequately to reduce pollution.  <i>In hindsight this was not a Low risk, it has eventuated, and the project had no mitigation measures</i>
6 Sedimentation catchment management processes not adopted by villagers, and not replicated	L	The project has built in considerable training and participatory expertise (based on successful examples pioneered by ICRAF elsewhere in eastern Africa, as well as locally eg TACARE in Tanzania). Funds are allocated for dissemination and lessons learned.	Sedimentation catchment management processes have been adopted by villagers, and though not much replication has taken place.  <i>The risk did not eventuate as far as the adoption of methods goes, however, replication remains elusive and the project has no mitigation measures</i>
7. Regional Institutional Support is not internalized and so project activities are not enhanced	L	This links back to Risks 1-4 above, with concerns about regional cooperation being compromised with security problems and with countries reduced willingness to contribute to regional institutions.	Regional institutional support has been internalized and so project activities are enhanced. In all the countries there is willingness by governments to adopt some of the project interventions and replicate them to other areas within their countries. A good example of this is the tree planting initiatives in DRC, Tanzania and Zambia; Revolving fund initiative in Zambia; The Energy saving initiatives in Tanzania and DRC.  <i>This risk did not eventuate</i>

The above table lacks one important element – the likelihood of the risk occurring. The ProDoc merely identified the risks, noted their severity and commented on them. In spite of the column headed “Abatement Measure”, the project had no mitigation measures, no response to any risks that eventuated, and some did – this is not good risk management. There was also one risk which was not identified by the ProDoc (although it did appear as a critical risk in the PIRs) – the risk arising from reliance by the project on a result from a co-funding agency activity, namely, the building of the Kigoma Wastewater Treatment facility through a loan from the Nordic Development Fund. When this unidentified risk cropped up, the project did not have a response. UNDP pointed out that critical risks are identified in the PIRs but this section only appears in PIR2010 and the “risk management strategies” do not seem to be particularly effective.

However, while the above is the overall picture, WWF informed the evaluator that the DR Congo component had elaborate risk management and mitigation measures in place (financial and programmatic delivery risk). This is how the non-compliance to financial operational procedures was dealt with effectively and in a timely manner and how the project reacted to a deteriorating security situation. Risk management overall is rated as **Moderately Satisfactory (MS)**.

### 3.6 Linkages between the project and other interventions

The ProDoc rightly notes that the Lake Tanganyika environment had become the focus for a number of interventions at the time of the UNDP/GEF project formulation, including earlier interventions by the GEF itself. These included the regional management and fisheries project of FAO/FINNIDA dealing with the biological basis of lake productivity; the role of ecotones in Lake Tanganyika by DANIDA/UNESCO; construction of wastewater treatment facilities for Bujumbura by KFW (Germany)/SETEMU in Burundi; setting up and management of a research centre in ichthyology and hydrobiology by AECD (Belgium) in Burundi, Rwanda and DRC. To a great extent, this project was founded on these earlier interventions and linked to them. These links were also recognized as co-financing elements for the purpose of the GEF project as in the following table.

**Table 5. Components of the Lake Tanganyika Integrated Management Programme (from the ProDoc)**

GEF SPONSORED COMPONENTS		CO-FINANCED COMPONENTS	
Establishment of Lake Tanganyika Authority; update SAP; draft protocols	Supporting Wastewater Treatment Plants in Bujumbura and Kigoma	Pilot Fisheries Co-Management; Infrastructure to Add Value Fish Products; Fisheries Monitoring / Systems (ADB, FAO, NDF)	Community infrastructure and the Establishment of Local Development Funds (ADB & NDF)
Demonstration Sites for Sustainable Catchment Management (DRC, Tz and Zambia)	Establishment of Lake Monitoring-Management System (with IUCN)	Construction of Wastewater Treatment Plant in Kigoma (NDF)	Capacity Building of Local and National Stakeholders (ADB, FAO and NDF)

The closest linkages were forged with the African Development Bank / Nordic Development Fund supported *Project to Support the Lake Tanganyika Integrated Regional Development Programme* (PRODAP), with which this project makes up the Lake Tanganyika Regional Integrated Management and Development Programme (LTRIMDP). The PRODAP, which is coordinated by the LTA, focuses on addressing topics of unsustainable fisheries and pollution as well as on overall development activities. It is managed by separate National Coordination Units (NCUs) but the two projects have shared the same Project Steering Committees and this has worked well in the main. Unfortunately, progress on the two projects has not been in full harmony.

## 4 FINDINGS: PROJECT IMPLEMENTATION – EFFICIENCY

### 4.1 Project governance

The Project Steering Committee (PSC) is recognized as the highest governance level for a project and must have the necessary authority and power. It plays a key role in setting policy for the project, monitoring project performance, providing guidance and directions to the PM and other project stakeholders, and supports UNDP which, as the GEF IA, has the ultimate accountability for delivery of project products and the administration of project funds.

As with other aspects of this project, its governance was somewhat complex – there were five Steering Committees, one for each component and there were also local level Project Management Committees for some components<sup>26</sup>.

At the **Regional** level, the ProDoc states that “oversight of the Programme activities will be the responsibility of the LTMC [which will] serve as a steering committee of the Programme and will convene annually to review the Programme objectives, outputs and new and emerging issues.”

The first available minutes of the regional PSC are from the Second Ministerial Conference of April 2008 at which the UNDP/GEF RTA formally announced the project. The next minutes are labelled Third Lake Tanganyika Management Committee in August 2009 and this meeting reached an agreement that the Management Committee be tasked with drawing up ToRs for the Project Steering Committee function which in effect will be the same as the Management Committee. At the Fourth meeting in November 2010, the Management Committee started functioning as the PSC and among other things, approved the AWP for 2011 for the project.

The general impression is that the meetings were focussed very much on LTA business and less on project steering. However, this should probably be expected from a committee with such a wide brief.

In **Burundi**, UNDP advised that the LTA MC served as the formal PSC and this, in effect, deprived the government and stakeholders of a role in decision-making. However, a national PSC did exist and the first meeting took place in February 2011 when it was confirmed that the same committee will serve the UNDP/GEF project as well as the PRODAP which had started some time earlier<sup>27</sup>. It met again a month later in March 2011 when it dealt mainly with PRODAP business. The next meeting was in August 2011, and it was focussed primarily on the UNDP/GEF project and the majority of the time was spent discussing the scope and organization of the project. At the latest meeting for which minutes are available, in February 2012, the Annual Report for 2011 was presented and discussed and reference was made to the Nairobi meeting (in December 2011) and to the allocation of funds for the Buyenzi sewage works. No further meetings appear to have taken place over the past 15 months<sup>28</sup>.

The **Tanzania** Component had a fully functional Project Steering Committee as well as a local Project Management Committee (PMC). The earliest available PSC minutes are from the Second Meeting in April 2010 at which the AWP and Budget for 2010 were discussed. The Third PSC meeting took place in February 2011 and the 2011 AWP and Budget was presented and discussed. The Fourth PSC meeting was in May 2012 and the AWP for 2012 was the main item of discussion – it was found to be wanting and it was deferred for further work and resubmission. In closed session the meeting also discussed project management vis-à-vis the low delivery rate and decided on a change in management. The loss of the NDF loan for the wastewater treatment plant in Kigoma,

<sup>26</sup> Three PSC meetings are known to have taken place for the DR Congo Component but minutes have not been available to the evaluator

<sup>27</sup> In all components, the body serving as PSC for the UNDP/GEF project also performed the same function for the PRODAP. This approach had a number of advantages and is seen as a good model by the evaluator.

<sup>28</sup> This issue has been raised already in section 3.2 and footnote 20.

was discussed (under Fisheries Development), and according to the VPO, the meeting advised the PS “to form a committee for close follow up”<sup>29</sup>. The next PSC meeting was scheduled for November 2012 but minutes of that meeting are not available to the evaluator.

Regarding the Project Management Committee, the First meeting, wrongly labelled PRODAP, took place in November 2008 and comprised an introductory type of meeting lasting one and a half hours. Following that, meetings took place approximately quarterly and although they did discuss UNDP/GEF project business, they did not focus on technical matters but dwelt instead on procedural matters and traversed the same ground as the PSC, but with local representation.

The **Zambia** Component, as with the other components, shared its PSC with the PRODAP project. It had specific ToRs but in effect, the PSC was engaged wider than its ToRs, to the benefit of the project, in particular, it approved Annual Work Plans which provided approval for the PMU’s operation. The PSC met seven times during the life of the project, approximately every 6 months. From observations at the meeting he attended, the evaluator found the meeting to be very well run, efficient but without excessive formality. Discussion was open and frank and executive decisions were made which provided clear guidance to the Project Manager.

The numbers attending meetings ranged from a low of 15 members to a high of 25 members with no discernible pattern. Alternates are used quite widely and although this is undesirable, it is quite understandable in view of the senior levels of membership.

Overall project governance is rated as **Moderately Satisfactory (MS)**.

## 4.2 Management arrangements

The ProDoc warned that “*These management arrangements appear, at first sight, to be complex*” and this evaluation has confirmed the complexity. In spite of the repeated assertion that this is one, single GEF project, there were three project documents, five project management units (one of which was designated as a coordinating unit), four national Project Steering Committees, a PSC which dealt with three components, and three Executing Agencies. A further complication was the difference in effective starting dates for the different components and their different closure dates and/or extensions. This made cross-country management and coordination challenging – because the country Projects were at different stages in the project cycle. In addition, although the PCU was formally established in October 2008 with the fielding of the Regional Coordinator, it was not truly operational for some time after that and by then, the Tanzanian and Zambian components were well underway, making it difficult for the PCU to coordinate their activities (see Table 2 in section 2.1).

These differences in execution arrangements and time-scales provided challenges for the PCU and UNDP as the project IA and this was reflected in the PIRs.

The **Regional Project Coordination Unit (PCU)** set up by UNOPS was responsible for overall planning and management and for holding the project together. It was also responsible directly for activities under the Regional Component (institutional support to LTA including protocol development, Regional Monitoring Framework, etc) and activities at national level in Burundi and DR Congo although both had a PMU, a PM and a National Project Steering Committee. The PCU (and the project) was led by a Project Regional Coordinator (PRC), and technical staff comprised a Technical Advisor (for some of the time), a Finance Officer, and an Administrative Assistant. Two out of the five project personnel were women. There was a change of PRC and the past PRC and TA were not available for consultation. From dealings with the incumbents at the time of the

<sup>29</sup> The VPO also advised that “*the VPO in collaboration with Ministry of Finance have discussed the matter with NDF and the response is that the funds can be accessed under the Climate Change Adaptation/Mitigation window*”. The evaluator notes that this does not explain why this source of co-financing was forfeited and questions the appropriateness of accessing the funds under the climate change window.

evaluation the PCU was seen as a highly efficient unit with competent personnel who had a good rapport with the rest of the project entities. The PCU did indeed provide the coordination necessary to keep the project together. The location of the PCU, within the LTA offices provided an excellent opportunity for collaboration and mutual support with the various directors in the Secretariat.

The **Burundi Component** was one of the two that started late. It was a small PMU comprising a PM, an Administrative Assistant and a Driver, however, it worked very closely with officials from SETEMU and INECN who were in effect part of the implementation unit – the evaluator observed that the working relationship was close and effective. The Burundi PMU was challenged in dealing with activities under Output 1 – the sewage works in Buyenzi. UNOPS-IWC made an arrangement for the installation of the sewer lines to another unit in UNOPS, namely KEOC, which turned out to be difficult for the PMU to manage and accept accountability for.<sup>30</sup> The PMU was unhappy with the arrangements for budget management which required expenditures and procurement to be routed through the PCU thus lengthening the process and reducing project management efficiency – this lack of delegation was also thought to be the reason why information requested by the evaluator could not be provided in full and in a timely manner. It is considered a positive feature of this PMU that the Burundi PM was one of two PMs (the other was Zambia) that remained with the project from its start right up to its planned closure and through its extension.

The project management responsibilities for the **DR Congo Component** were subcontracted by UNOPS to WWF through a competitive process. At the time of the evaluation, the project in DR Congo was coming to an end and the PMU had virtually disbanded. Earlier on, there had been an episode of financial impropriety and a change in PM. From what could still be observed by the evaluator, the project in DR Congo had been well-managed in general and the financial offence was not due to mis-management. The evaluator was also able to observe the strong rapport between remaining project personnel and the stakeholders at NGO and grassroots levels – this was one of the most important ingredients leading to the project's success in DR Congo.

In **Tanzania**, the project was nationally executed with the Vice-President's Office as the EA. This led to the PMU having a higher degree of autonomy and the UNDP Country Office being more involved in day-to-day project implementation. The PMU was based in Kigoma which was the focus for project activities. By the time of the evaluation, there had been three PMs for the project in Tanzania and UNDP CO advised that each had been selected through a competitive process and each had the required qualifications and prior experience elsewhere. UNDP also noted that managing a project of this nature required multidimensional qualities which are not easily found in one person. One of the PMs had been a woman but as with other components, the project in Tanzania cannot be claimed to have been gender-sensitive. The incumbent managing the project at the time of the evaluation had been involved as a technical expert previously and this was evident in his good rapport with stakeholders in the catchment. He also provided a great deal of information to the evaluator, perhaps more than can be expected from someone who has only recently taken over as an interim PM. When the evaluator referred to the VPO for supplementary information, the picture that emerged was somewhat confused and incomplete. A previous PM noted the difficulties encountered in monitoring project progress in the absence of baselines and useful indicators.

In **Zambia** too, the project was nationally executed with a discrete ProDoc, and a PMU with a higher degree of autonomy. The UNDP Country Office was also more involved in day-to-day project implementation. Because of the timing of the evaluation (two weeks before project operational closure) it was not possible to observe at first hand the working of the PMU which by then had started to disband. However, from all accounts and from the products produced, the unit appears to have worked cohesively, and successfully. The PMU had been based close to the centre of project activities, in Mpulungu close to the local administration with which it had had a successful relationship throughout the project. Management style appeared low key and effective, obtaining the best from all staff by providing them with opportunities to do well. The evaluator was able to

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<sup>30</sup> The relationship between UNOPS-IWC and UNOPS-KEOC is discussed under section 4.7.5.

observe the excellent rapport that project personnel appeared to have with the leaders and community members of the two villages visited.

In spite of the above shortcomings, project management and administration are rated as **Satisfactory (S)** overall.

## 4.3 Stakeholder involvement and partnership arrangements

### 4.3.1 Stakeholder participation in project implementation

According to the GEF, “*Effective public involvement is critical to the success of GEF-financed projects. When done appropriately, public involvement improves the performance and impact of projects.*”<sup>31</sup> If “public” is interpreted as the broad scope of stakeholders, in the case of this project, public involvement in project implementation has been at a high level. If “public” is interpreted as those at community and grassroots level, their involvement in project implementation has been even higher.

In **DR Congo**, the evaluator witnessed the strong engagement of the project in Uvira with community level NGOs and individual farmers. And, while resenting that the project was not executed nationally, government officials displayed a strong sense of ownership of the project and committed themselves to upscaling and replicating the results of the project.

In **Zambia**, the communities of Mpulungu and surrounding districts, were equally as proud of their achievements as their neighbours in Uvira and considered themselves as the owners of the project. This genuine sense of ownership was also displayed by the MLNREP in Lusaka, and even more so among the local administration in Northern Province, right at the highest levels of local decision-making.

The evaluator was positively surprised in **Tanzania** by the strong commitment to the project by the army who recognized that what the project had helped them implement (reforestation of degraded land) was not only good for the environment and the lake, but also for the image of the army among the community. The same commitment was seen by the evaluator among the officials from the Vice-President’s Office who were involved in one way or another with project implementation.

In **Burundi**, the interest and commitment to the project by the Municipal Administrator struck the evaluator as exemplary, and the dedication of SETEMU personnel was impressive.

This was a project of the Governments and people of the Lake Tanganyika environment. The Governments, at both central and local levels, were the owners of the project regardless of whether it was being implemented in the NEX/NIM modality as in Tanzania and Zambia or through agency execution as in Burundi and DR Congo. The Governments, both directly and through the LTA, have been fully involved in the governance of the project, providing guidance and direction and requiring accountability. The Governments have served as true partners, sharing in project implementation, particularly through the provision of expertise by local officials and experts. The Governments have also been involved in monitoring progress and delivery by the project through the respective PSCs as well as through the many Central, District and Provincial officials who participated in the project.

While various arms of Government are clearly among the main beneficiaries of the project, the Governments are also just as clearly the owners of this project and this augurs well for the sustainability of the project’s benefits, products and services.

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<sup>31</sup> See <http://www.thegef.org/gef/gef/node/2024>



### 4.3.2 Partnerships

The OECD<sup>32</sup> considers partners as *“The individuals and/or organizations that collaborate to achieve mutually agreed upon objectives”* and it adds that *“the concept of partnership connotes shared goals, common responsibility for outcomes, distinct accountabilities and reciprocal obligations”*.

Going by this definition, the Governments can be seen as true partners in the implementation of this project. They are fully involved in the search for the same goals and objectives as UNDP and the GEF; they share responsibility for achieving the project outcomes through their officials, both at the policy and at the technical levels; they see themselves as sharing accountability for delivering the project products; and in the main, they have satisfied their obligations to the project particularly through the availability of personnel to work on various aspects of the project from governance to sediment sampling and pollution control.

In its discussion of partnerships, the ProDoc referred to the Programme Partnership Committee comprising GEF/UNDP, FAO, AfDB, IUCN, NDF, EU-COMESA, which met regularly to improve coordination and linkage. The Project was expected to link with the World Bank Lake Victoria Environmental Management Project<sup>33</sup> and the Lake Victoria Fisheries Organization, and to the developing Nile Basin Initiative, to share experiences. In Burundi, the Project was to link to the World Bank/GEF PRASAB *“Programme de Rehabilitation et d’Appui au Secteur Agricole au Burundi”* Project (USD 40 million WB & GEF funding) with its objective of reducing rural poverty by improving food security and increasing rural income of small-scale agricultural products producers. In DRC, the Project was to link to the World Bank funded Emergency Economic and Social Reunification Support Project (USD 214 million WB funded) which aims to assist the Government in the process of economic and social reunification. It helps mitigate the ongoing social and humanitarian crisis, hence contributing to the country stabilization. In Tanzania, the project was to link closely with co-financed activity through UNDP *“Assistance to the Implementation of the Regulatory Framework for Environmental Conservation,”* which was starting in Kigoma Region. The Project will also link to the ongoing WB Forestry Conservation Management Programme (USD 31 million), the Agriculture Sector Development Programme, the DANIDA supported SIMMORS projects on the upper Malagarasi in the Lake Catchment and the UNDP Small Grants Programme.

Stakeholder participation in project implementation, ownership and partnership arrangements are rated as **Satisfactory (S)**.

## 4.4 Project finance

### 4.4.1 Budget planning, management and efficiency

This is not a financial audit and the focus of this evaluation is on the planning and management of financial resources made available by the GEF. The departure point for such an assessment is the ProDoc and as usual, the ProDoc for this project went through a number of iterations, and with it, the budget. Further revisions were made to the budget, for reasons discussed below (after discussion at the project Inception Workshop), and approved at the 3rd LTA MC meeting in July 2009 which served as the First PSC meeting for the UNOPS executed components.

The first attempt by the evaluator at assessing the budgetary side of the project was based on an outdated version of the ProDoc which had been provided. This was rectified after the draft report

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<sup>32</sup> DAC Working Party on Aid Evaluation (2002) *Glossary of Key Terms in Evaluation and Results Based Management*. OECD, Paris.

<sup>33</sup> One immediate example is in the use of ICRAF to provide integrated watershed management training and support.



had been produced and the assessments below are based on more recent and more up-to-date versions provided after the draft report was made available. It is also reliant on information obtained from the PCU and the PMUs during the data gathering phase of the evaluation.

The following table is created by the evaluator starting from the version in the up-to-date ProDoc, amended according to information provided subsequently by the PCU. While I am confident that this is the best information available to me, its accuracy remains subject to verification. This is because the component allocations in the table do not all tally with the figures provided by individual PMUs.

**Table 6. GEF allocations to Components (in millions of US Dollars)**

OUTCOME	Region	BUR	DRC	TANZ	ZAM	TOTAL
1 Regional Institutions	3.811	-	-	-	-	3.811
2 Waste-Water Interventions	-	1.899	-	0.300	-	2.199
3 Catchment Management	0.650	-	2.000	2.200	2.440	7.290
4 Lake Monitoring Processes	0.200	-	-	-	-	0.200
<b>TOTAL</b>	<b>4.661</b>	<b>1.899</b>	<b>2.000</b>	<b>2.500</b>	<b>2.440</b>	<b>13.500</b>

The PCU and UNDP advised that the Project budgets, especially the UNOPS management components were revised to accommodate the ICRAF and IUCN contracts whose inputs were considered very crucial to the attainment of the overall project objectives and which had not been envisaged in the original budget although their input had been foreseen. Another issue that arose was in relation to Output 1, Establishment of the LTA Secretariat. Although it was foreseen at project formulation that the project would assist with the establishment of the LTA (hence formulation of Outcome 1), the need arose to assist with the salaries of the Executive Director and Director of Environment for one year – this had not been envisaged in the original budget and had to be accommodated. Furthermore, the project had to ensure that the regional budget was sufficient to support two senior international staff in the Security Phase 3 situation it faced in Burundi at the time – this had not been considered in the original budget.

These changes are considered by the PCU as examples of adaptive management and the evaluator agrees.

The following tables were received by the evaluator in response to templates distributed to each of the PCU and the PMUs. Each is discussed respectively but a general observation can be made here – there have been many budget changes and revisions and not all have been well-recorded. This has created difficulties for the evaluation and the figures given below still do not always add up and do not have the full confidence of the evaluator. They are reproduced as received, and following the opportunity for corrections provided by the availability of the draft report.

**Table 7. Original budget, expenditure and remaining funds – Regional Component**

REGIONAL COMPONENT			
OUTCOME	ORIGINAL BUDGET	LATEST TOTAL EXPENDITURE	CREDIT REMAINING
<b>Outcome 1:</b> Regional and national institutions have internalized the implementation of the SAP and FFMP and provide institutional support for the cooperative management of Lake Tanganyika under the ratified	2,614,000	1,967,370	646,629

Convention			
<b>Outcome 2:</b> The quality of the water of Lake Tanganyika is improved at two identified pollution hotspots through wastewater treatment	298,000	207,818	90,181
<b>Outcome 3:</b> Sediment discharge reduced from demonstration catchment management sites; providing significant livelihood benefits to local people, and seeking long-term adaptation measures to changing climatic regimes	996,000	827,629	168,370
<b>Outcome 4:</b> Regional monitoring and management systems contribute to the long-term sustainable management of Lake Tanganyika	283,000	390,648	107,648
<b>Project Administration and Management</b>	?	?	?
<b>TOTALS</b>	<b>4,191,000</b>	<b>3,393,461</b>	<b>797,533</b>

The above table is as supplied by the PCU. The figures given as original budget reflect the revisions carried out before and after the final adoption of the ProDoc, but they do not match the figures in Table 6 above. No figures were provided for Project Administration and Management.

**Table 8. Original budget, expenditure and remaining funds – Burundi Component**

BURUNDI COMPONENT			
OUTPUTS	ORIGINAL ALLOCATED BUDGET	EXPENDITURES UP TO 2012	CREDIT REMAINING
<b>Output 1</b> Tertiary and secondary wastewater collection network constructed and completed in Bujumbura city (Buyenzi suburb)	725,000	446,591 (for contractor only)	278,409 (to be confirmed)
<b>Output 2</b> The water treatment lagoon station commissioned and pre-treatment facilities operational	<b>Note by evaluator</b> - This Output was totally co-financed by a parallel project and should not have appeared in the budget		
<b>Output 3</b> Discharge standards established, approved and issued, monitoring inputs developed and capacity built	376,000	284,326	11,673
<b>Output 4</b> Awareness of urban communities about the biodiversity and public health impacts of pollution raised and monitoring inputs developed	305,000	104,462	53,000
<b>Output 5 (Project Administration and Management)</b> Implementation study updated and project component efficiently managed, monitored, and evaluated	493,000	222,000	189,866
<b>TOTALS</b>	<b>1,899,000</b>	<b>610,788</b>	<b>204,540</b>

The above is as supplied by the PMU following a protracted exchange of emails which does not create a good level of confidence. The total shown as allocated in the original budget reflects the revision carried out before the final adoption of the ProDoc. As noted in the table by the evaluator, Output 2 is purely a co-financed activity and should not have been included and some of the other figures do not add up. It is also known that the budget for Output 1 was US\$1,033,000 and not as given above. The approved ProDoc shows a budget of USD1.969 million for the Burundi component and this was further reduced to USD1,776,666 and approved by the First PSC Meeting (the Third MC in Uvira). Furthermore, the evaluator is aware that UNDP has met with difficulties when trying to obtain accurate statements of expenditure and credit remaining for Output 1 which was executed by UNOPS-KEOC through an arrangement with UNOPS-IWC. This is discussed below in section 4.7.5. Furthermore, the budget for Project Administration and Management is some 26% of the GEF funds and this is considered excessive<sup>34</sup>.

**Table 9. Original budget, expenditure and remaining funds – DR Congo Component**

#### DR CONGO COMPONENT

<sup>34</sup> UNDP explained that the project was formulated and approved before the 10% rule was adopted by GEF and it was usual for all staff salaries to appear under this component together with some equipment, some consultancies, travel budgets, etc, and it was not uncommon to have a project management budget around 25% for GEF financed projects.

OUTCOME	ORIGINAL ALLOCATED BUDGET	FINAL EXPENDITURE	FINAL BALANCE
<b>Outcome 1:</b> 'Government and community natural resource management institutions strengthened'	177,254	95,764	81,490
<b>Outcome 2:</b> 'The natural resource base in and around Uvira sustainably managed through improved land-use practices'	1,633,415	1,721,428	(88,013)
<b>Project Administration and Management</b>	144,853	145,405	552
<b>TOTALS</b>	<b>1,955,522</b>	<b>1,962,597</b>	<b>(7,075)</b>

The figures above are as supplied by the PMU and reflect the final accounting as presented to UNOPS. As noted by WWF, they had to provide some co-financing before closing the accounts "because farmers planted much more than planned during the second year" and this was seen as less of a burden and more of a conservation gain. WWF also advised that the "Administration and Management fee is only limited to that applicable at WWF level. It is possible that UNOPS has also a component of management fee." In the template supplied by the evaluator, the Project Management and Administration figure is expected to include much broader expenses than the management fee and it would therefore seem that this amount is understated. The DR Congo Component was also troubled by a case of financial misappropriation which is described by WWF as a case of "armed robbery". It was dealt with satisfactorily and the majority of the funds were recovered. UNDP understands that WWF (the sub-contractor) absorbed any remaining shortfall which means that all funds were recovered from UNDP/GEF project perspective (i.e. no financial loss to the project).

**Table 10. Original budget, expenditure and remaining funds – Tanzania Component**

TANZANIA COMPONENT			
OUTCOME	ORIGINAL BUDGET	LATEST TOTAL EXPENDITURE	CREDIT REMAINING
<b>Outcome 1:</b> Sedimentation into Lake Tanganyika from pilot villages is reduced through integrated catchment management, thereby improving lake habitats	1,555,965	1,394,824	161,142
<b>Outcome 2:</b> Wastewater management at Kigoma – Ujiji Township strengthened, reducing point pollution levels of Lake Tanganyika waters and so improving biodiversity habitats	229,547	182,445	47,102
<b>Project Administration and Management</b>	600,000	507,134	92,866
<b>TOTALS</b>	<b>2,385,512</b>	<b>2,084,402</b>	<b>301,110<sup>35</sup></b>

Following a number of exchanges, providing different data, the above table is composed from the latest information provided by the PMU based on ATLAS records. In view of the variance existing in earlier versions of the table, the evaluator has limited confidence in the information provided above. The grand total in the original budget is US\$114,488 less than the original allocation (confirmed by UNDP/GEF RTA) of USD2,500,000. Advice received from the VPO confirms the confusion between the various totals but the evaluator is satisfied that the figures eventually add up. One item worth noting is the amount allocated to Project Administration and Management. After removing some staff salaries and adding them to Outcome 1 (not questioned by the evaluator), the budget remaining is 25% of the total budget and this is considered excessive according to present day GEF guidance (however, see footnote 32 above).

<sup>35</sup> UNDP Country Office has advised that all GEF funds had been spent by the end of March 2013.

**Table 11. Original budget, expenditure and remaining funds – Zambia Component**

ZAMBIA COMPONENT			
OUTPUTS	ORIGINAL ALLOCATED BUDGET	LATEST, REVISED BUDGET	CREDIT REMAINING AS ON 31 MAY 2012
<b>Output 1</b> Sustainable natural resources management practices	670,000	558,000	61,563
<b>Output 2</b> Alternative income generating activities (IGAs) [developed]	787,500	698,000	301,707
<b>Output 3</b> Awareness of stakeholders on the importance of sustainable natural resource management raised	118,500	150,000	19,392
<b>Output 4</b> Capacity of local governance structures for sustainable natural resource management enhanced	155,000	160,000	19,370
<b>Project Administration and Management</b>	709,000	874,000	82,831
<b>TOTALS</b>	<b>2,440,000</b>	<b>2,440,000</b>	<b>513,863</b>

The figures above tally with the original budget as in the ProDoc and the only concern (as expressed in the original TE) is the allocation for project administration and management, which went from a worrying 29% of the budget to 33%. UNDP explained that some costs, which finished up inadvertently within the project administration and management calculation, were in fact better placed under one or more of the four Outputs they were targeting (see also footnote 32 above).

In summary, and as the evaluator was advised, the Tanzania and Zambia budgets were reviewed and approved annually or whenever a need for a budget revision arose. DRC component was properly managed except for the case of financial theft, which was appropriately dealt with in a timely manner and without any financial loss to the project. The Regional component's annual budget (together with the DR Congo and Burundi components) was tabled and approved at PSC meetings regularly. DRC component submitted a financial report every quarter to UNOPS and Burundi submitted a financial report every quarter to the government (except for the part handled by KEOC) as part of their progress reports. The only place where management of the budget (in terms of reporting and approval of any revisions) was opaque was the part handled by KEOC.

However, the difficulties faced by the evaluator in obtaining accurate financial figures, and the remaining discrepancies in some of the tables above, indicate that not all PMs were in full "control" of their respective budgets. While this may be caused by the ATLAS accounting system which does not always provide a PM with the budget information required for management, it does not create a reassuring picture overall. When this is added to the yet to be resolved impasse between UNDP and UNOPS on the KEOC statement of accounts<sup>36</sup>, the rating emerges as **Moderately Unsatisfactory (MU)**.

#### 4.4.2 Co-financing

As required by the ToRs, this evaluation was to assess the situation regarding co-financing for the project and the evaluator sought the basic information first from the ProDoc and then specifically from the PCU and the component PMUs<sup>37</sup> by providing a template table to be filled in and returned.

As was the case with the overall budgetary information, the co-financing information provided initially to the evaluator was out of date (outdated version of the ProDoc). This was recognized when the draft report was made available, and rectified. The following table is taken from the latest version of the ProDoc and reflects written pledges of co-financing made to the project.

<sup>36</sup> The response of 23 May 2013 from UNOPS-IWC to UNDP provides the best financial information to date on the sewer works in Buyenzi, however, USD152,093 (17% of allocation) is still unaccounted for and in a situation where a household connection costs less than USD100, this amount of money is significant.

<sup>37</sup> The DR Congo Component was inadvertently missed out and a co-fin table was not obtained from the PMU by the evaluator. Total figures quoted do not include any amount that might have accrued from DRC.

**Table 12. Co-financing pledged (as from the ProDoc) together with the amounts delivered as advised to the evaluator**

PARTNER	CLASSIFICATION	TYPE	AMOUNT PLEDGED	STATUS	AMOUNT DELIVERED
ADB **	Multilateral	Concessional Loan / Grant	36,940,000	Confirmed	22,480,000
NDF	Bilateral	Concessional Loan	7,860,000	Confirmed	0
IUCN	I NGO	Grant	1,000,000	Confirmed	0
Governments	Government	In-kind inputs	2,089,500	Agreed	4,869,000
UNDP	GEF IA	Grant			1,300,000
<b>TOTAL</b>			<b>47,889,500</b>		<b>28,649,000</b>

\*\* This input will increase with an additional grant to Burundi

The amounts in the right hand column above are derived from information provided by the PCU and the PMUs as well as from consultations. The amount pledged in co-financing was at a ratio of 1:3.5, and the amount delivered was at 1:2 – this is still within the GEF requirements current at the time.

More specifically, the information received at Component level, is as shown in the following table, reproduced as received. All amounts are in US Dollars.

**Table 13. Responses from PCU and PMUs on cofinancing**

Regional Component								
CO-FIN TYPE	UNDP		GOVERNMENT		OTHER SOURCES		TOTAL CO-FIN	
	PLEDGED	ACTUAL	PLEDGED	ACTUAL	PLEDGED	ACTUAL	PLEDGED	ACTUAL
Grants	400,000	400,000					400,000	400,000
Credit								
Loans								
Equity								
In-kind			2,089,500	2,089,500			2,089,500	2,089,500
Other					1,193,000	1,193,000	1,193,000	1,193,000
<b>TOTALS</b>	<b>400,000</b>	<b>400,000</b>	<b>2,089,500</b>	<b>2,089,000</b>	<b>1,193,000</b>	<b>1,290,000</b>	<b>3,682,500</b>	<b>3,682,500</b>
Burundi Component								
CO-FIN TYPE	UNDP		GOVERNMENT		OTHER SOURCES		TOTAL CO-FIN	
	PLEDGED	ACTUAL	PLEDGED	ACTUAL	PLEDGED	ACTUAL	PLEDGED	ACTUAL
Grants	1,899,000		1,193,000	1,190,000				
Credit								
Loans								
Equity								
In-kind								
Other								
<b>TOTALS</b>	<b>1,899,000</b>		<b>1,193,000</b>	<b>1,190,000</b>				
Tanzania Component								
CO-FIN TYPE	UNDP		GOVERNMENT		OTHER SOURCES		TOTAL CO-FIN	
	PLEDGED	ACTUAL	PLEDGED	ACTUAL	PLEDGED	ACTUAL	PLEDGED	ACTUAL
Grants	260,000	260,000					260,000	260,000
Credit								
Loans					7,860,000		7,860,000	
Equity								
In-kind			937,500	937,500			937,500	937,500
Other								
<b>TOTALS</b>	<b>260,000</b>	<b>260,000</b>	<b>937,500</b>	<b>937,500</b>	<b>7,860,000</b>	<b>0</b>	<b>9,057,500</b>	<b>1,197,500</b>

Zambia Component								
CO-FIN TYPE OR SOURCE	UNDP		GOVERNMENT		OTHER SOURCES (GEF)		TOTAL CO-FIN	
	PLEDGED	ACTUAL	PLEDGED	ACTUAL	PLEDGED	ACTUAL	PLEDGED	ACTUAL
Grants	400,000	400,000			2,440,000	2,440,000		
Credit								
Loans								
Equity								
In-kind			652,000	652,000				
Other								
<b>TOTALS</b>	<b>400,000</b>	<b>400,000</b>	<b>652,000</b>	<b>652,000</b>	<b>2,440,000</b>	<b>2,440,000</b>		

Some of the above data were the subject of protracted exchanges with the respective PMU and even then, the information provided is often erroneous and/or incomplete. In addition, some significant amounts (40%) of the co-financing pledged did not eventuate and the project (probably should have been the PRC) did not seem to pursue and try and facilitate it<sup>38</sup>. The role of co-financing and its management is not well understood and the overall rating is **Moderately Unsatisfactory (MU)**.

## 4.5 Monitoring and evaluation

The main ProDoc makes a distinction between the monitoring envisaged under Outcome 4 which is a long term part of lake management, and monitoring of project implementation. This evaluation makes the same distinction and this section is focussing on monitoring of the project.

### 4.5.1 Monitoring plans at entry level

The GEF requires that all projects must include “a concrete and fully budgeted monitoring and evaluation plan by the time of Work Programme entry for full-sized projects”.<sup>39</sup>

The main ProDoc makes a commitment on behalf of the ILTMA that a detailed Monitoring and Evaluation work plan will be developed at inception. This is meant to include a schedule of the activities, their cost and the expected outputs and achievements according to the established benchmarks and milestones. *Detailed implementation modalities* are expected to be presented in the *Inception Report, due within 4 months of start-up*. The ProDoc then refers to *Annex 11 for more details*, but this is not available to the evaluator.

The Tanzania ProDoc also makes a commitment on M&E – “During the inception period, the project team will prepare a detailed Monitoring & Evaluation plan.” Whereas the Zambia ProDoc outlines a monitoring system that will involve various levels of stakeholders but does not provide a plan.

None of the inception reports produced an M&E Plan, in fact two inception reports did not even mention M&E.

The M&E Plan required by GEF should comprise a number of minimum requirements as in the following tables. The tables were provided by the evaluator as part of the self-assessment approach and comprise each Project Manager’s perspective on the requirements, as well as the

<sup>38</sup> Regarding the co-financing from the Nordic Development Fund for the Kigoma Wastewater Treatment Plant, the evaluator was advised by the NCU that the procurement was “too large to be handled by the District” and the “procurement process in Tanzania is a long process”. In spite of commendable efforts by UNDP, the loan was not taken up, the co-financing did not eventuate and the UNDP/GEF project was deprived of an effective outcome.

<sup>39</sup> See - <http://gefweb.org/MonitoringandEvaluation/MEPoliciesProcedures/MEPTools/meptstandards.html>



evaluator's summary comments on the way that each component is seen as having satisfied these elements.

**Table 14. GEF M&E minimum requirements**

REGIONAL COMPONENT		
GEF M&E REQUIREMENTS	PCU RESPONSE	EVALUATOR'S COMMENTS
SMART indicators for project implementation, or, if no indicators are identified, an alternative plan for monitoring that will deliver reliable and valid information to management	The project has had SMART Indicators( Process indicators, Stress Indicators and Environmental Indicators) Examples: <b>(1) Performance indicators</b> (*Information Systems and web site in place and operational by 2008; and Improvement in water quality monitoring data by 2011.) <b>(2) Stress Reduction indicators</b> such as (Catchment management treatment practices are adopted in at least three other sites by 2010; Wastewater plant efficiently and sustainably operationalized in Bujumbura by 2010-allowing additional quantities of wastewater collected and treated before discharge into the Lake by 2011) and <b>(3)Environmental Indicators</b> such improvement of water quality in Kigoma and Bujumbura by 30%)	The majority of the examples provided are not really indicators – they are Targets, and they do not satisfy the SMART criteria.
SMART indicators for results (outcomes and, if applicable, impacts), and, where appropriate, corporate-level indicators	SMART Indicators were established for results such as Establishment of the LTA and significant reduction in turbidity and sediment load parameters measured in target rivers within the catchment of demonstration sites	Once again, these are not indicators – this is what the project set out to do. These are outputs and not outcomes/results <sup>40</sup>
A project baseline or, if major baseline indicators are not identified, an alternative plan for addressing this within one year of implementation	Project baseline were established for Example Water quality variables for different pollutants and social indicators such as average income per household	Baselines were absent from the original project documentation and subsequent efforts did not produce an explicit departure point for the project
An M&E Plan with identification of reviews and evaluations which will be undertaken, such as mid-term reviews or evaluations of activities	An M & E plan was established with Bi-annual National Project Steering Committee meetings for the PMUs and annual Regional Project Steering committee meetings and Annual PIR meetings	The M&E Plan was not sighted, however, the “events” described are valid monitoring events
An organizational setup and budgets for monitoring and evaluation	The organisational setup was established with budgets for monitoring. See attached organogram	It is known that the LTA has an established position of Director of M&E who was reported to be fully involved and engaged in the PIR process each year. However, it is not known if monitoring took place at project level. A budget of USD200,000 for M&E was indicated at an Inception Workshop presentation and the final expenditure on MTE, TE, PIRs, etc, was higher than the original allocations.

BURUNDI COMPONENT		
GEF M&E REQUIREMENTS	PMU RESPONSE	EVALUATOR'S COMMENTS
SMART indicators for project implementation, or, if no indicators are identified, an alternative plan for monitoring that will deliver reliable and valid information to management	The project throughout its implementation has been focusing on the Indicators in the logframe.	Some so-called indicators are indeed adopted at Output level where they are not necessary. Many are not indicators at all and few if any are SMART
SMART indicators for results (outcomes and, if applicable, impacts), and, where appropriate, corporate-level indicators	They have been used as outlined in the project log frame	Same comment as above
A project baseline or, if major baseline indicators are not identified, an alternative plan for addressing this within one year of implementation	From our assessment, we think they have been used.	As noted elsewhere, there was no clear baseline for the project
An M&E Plan with identification of reviews	The Monitoring and evaluation has been used	There was no explicit M&E Plan

<sup>40</sup> UNDP advised that it is not uncommon to regard some tangible outputs as “outcome indicators” when they are (as they should be) contributing to the achievement of an outcome. The evaluator does not share this view.

and evaluations which will be undertaken, such as mid-term reviews or evaluations of activities	because the quarterly and annual reports, the mid-term Evaluation and Terminal Evaluation have been undertaken	although a "costed plan" was presented at the Inception Workshop covering Regional, Burundi and DR Congo Components
An organizational setup and budgets for monitoring and evaluation	This has been used at all levels.	There was no organizational setup or budget for monitoring

DR CONGO COMPONENT		
GEF M&E REQUIREMENTS	PMU RESPONSE	EVALUATOR'S COMMENTS
SMART indicators for project implementation, or, if no indicators are identified, an alternative plan for monitoring that will deliver reliable and valid information to management	<ul style="list-style-type: none"> <li>A logframe with smart indicators (see logframe) was adopted</li> <li>Appropriate monitoring system established and functioning with a dedicated database (MS Access) and tools of data collection</li> <li>An indicator tracking tool updated on quarterly basis</li> </ul>	This is a thorough approach in the absence of an original set of SMART indicators
SMART indicators for results (outcomes and, if applicable, impacts), and, where appropriate, corporate-level indicators	<p><b>Outcome 1:</b> Government and community natural resource management institutions strengthened</p> <ul style="list-style-type: none"> <li>Government extension service on NRM in the region is increased by 25%</li> <li>At least 10 new Community institutions are established and operational</li> <li>A consortium in place promoting NRM through experience sharing and extension</li> </ul> <p><b>Outcome 2:</b> The natural resource base in and around Uvira sustainably managed through improved land-use practices</p> <ul style="list-style-type: none"> <li>At least 60% of old woodlots rehabilitated.</li> <li>30% of degraded sites rehabilitated.</li> <li>At least 50 % of farmers use at least 1 agroforestry techniques.</li> <li>At least 30 % of farmers use 1 anti-erosion technique.</li> <li>At least 20 % of households use improved energy efficient technologies</li> </ul>	Although many of these are targets not indicators and while not entirely SMART, these "indicators" serve the purpose for monitoring
A project baseline or, if major baseline indicators are not identified, an alternative plan for addressing this within one year of implementation	<ul style="list-style-type: none"> <li>Aerial surveys and remote sensing analysis based on Satellite images acquired at beginning and end of project</li> <li>Rapid assessment at project onset was undertaken to inform the baseline</li> </ul>	In the absence of a baseline, this is an excellent way of establishing the departure point for the project.
An M&E Plan with identification of reviews and evaluations which will be undertaken, such as mid-term reviews or evaluations of activities	<ul style="list-style-type: none"> <li>Mid-term review was undertaken</li> <li>Project monitoring as an ongoing activity, with mandatory quarterly monitoring validation as the basis for quarterly reporting</li> </ul>	This is not an M&E Plan, however, it seems to be a valid alternative
An organizational setup and budgets for monitoring and evaluation	<ul style="list-style-type: none"> <li>Project budget mainstreamed budget allocation for monitoring by PMU, WWF &amp; MC (Management committee)</li> <li>WWF undertook various internal audits as part on financial and operation monitoring</li> </ul>	Project staff dedicated to M&E and budget were available under Output 8 - resources were not lacking when needed

TANZANIA COMPONENT		
GEF M&E REQUIREMENTS	PMU AND VPO RESPONSE	EVALUATOR'S COMMENTS
SMART indicators for project implementation, or, if no indicators are identified, an alternative plan for monitoring that will deliver reliable and valid information to management	The Project has SMART indicators that were agreed upon by stakeholders on the monitoring and evaluation criteria in all the outcomes in waste water and catchment management .This element was found to be weak in the original design of the project	The original LogFrame did not have SMART Indicators and the evaluator is not aware of an alternative plan for monitoring as required by GEF
SMART indicators for results (outcomes and, if applicable, impacts), and, where appropriate, corporate-level indicators	Results indicators were set in a way that during the preparations and endorsement of Annual/Quarterly work plans, emphasis was directed towards realising the impacts of the project to the ground i.e pilot villages	Same comment as above
A project baseline or, if major baseline indicators are not identified, an alternative plan for addressing this within one year of implementation	A study was commissioned to generate project baseline indicators as an alternative plan with monitoring framework within year one of implementation.	The LogFrame did not have baselines and the evaluator did not sight the "study was commissioned"
An M&E Plan with identification of reviews and	Reviews and evaluation plans has been regularly undertaken by Vice President's office, UNDP CO, Regional secretariats,	No M&E Plan has been sighted by the evaluator. Neither have reports of



evaluations which will be undertaken, such as mid-term reviews or evaluations of activities	Steering and project Management Committees. As highlighted above monitoring and Evaluation was regularly and continue to be undertaken by officials from the Vice President's Office, and in some cases joint monitoring between VPO and UNDP. Recommendations were provided to PMU and also were used to inform PSC on the progress on the implementation. However the reports are prepared in Kiswahili.	monitoring been available.
An organizational setup and budgets for monitoring and evaluation	The project has a planned budget for monitoring and evaluation at all levels. The project did not recruit M&E specialist as this was not one of the requirement of the project. In most cases monitoring was carried out by VPO, UNDP, PMC and Project steering Committee. Funding for project monitoring was budgeted at project level and VPO. At PMU level monitoring in most cases is charged under project management. Also VPO usually set aside on its annual budget on project monitoring. For instance under Development Budget L. Tanganyika Project the fund set aside for monitoring are as follows 2010/2011 budget was TZS 10,000,000, 2011/2012- TZS 32,000,000, 2012/2013, 127,150,000, and 2013/2014 TZS 72,000,000 <sup>41</sup>	It would seem that there was no M&E Specialist in the project team. However, the "planned budget" appears adequate

ZAMBIA COMPONENT		
GEF M&E REQUIREMENTS	PIU PERSPECTIVE	EVALUATOR'S COMMENTS
SMART indicators for project implementation, or, if no indicators are identified, an alternative plan for monitoring that will deliver reliable and valid information to management	They have been used. The project throughout its implementation has been focusing on the Indicators in the logframe.	With minor exceptions, the Indicators associated with the LogFrame are considered weak and do not possess the SMART characteristics. The PIRs use a different set of Indicators and these too are not very SMART. Indicators do not appear to have been very helpful to project management, especially to adaptive management.
SMART indicators for results (outcomes and, if applicable, impacts), and, where appropriate, corporate-level indicators	They have been used as outlined in the project log frame	As above. Indicators are generally not SMART. Often they are redundant and without the Targets would not be of any help in assessing outcomes and impacts <sup>42</sup> .
A project baseline or, if major baseline indicators are not identified, an alternative plan for addressing this within one year of implementation	They have been used. The information in the baseline was used to strengthen the indicators in the original log frame leading to production of the amended logframe	The baseline report focuses on socio-economic parameters and there is little if any baseline of a technical nature. The baselines in the revised LogFrame are virtually all "0". If this was indeed the situation, the project had to start from scratch.
An M&E Plan with identification of reviews and evaluations which will be undertaken, such as mid-term reviews or evaluations of activities	The M & E plan has been used. Quarterly reviews by the DDCC, National Project Steering Committee; Mid-term Evaluation and Terminal evaluation have been undertaken.	The ProDoc did not provide a M&E Plan and that supplied by the PIU is very modest - lacks clear timing or budgetary allocation.
An organizational setup and budgets for monitoring and evaluation	This has been used to a large extent in that all the levels as envisaged in the organogram have been actively playing their roles.	The PIU M&E Plan identified the persons responsible but there was no clear budget allocation for monitoring. The process of monitoring, analysis of data and application to adaptive management did not exist.

From the information available, it would seem that none of the components had an explicit Monitoring and Evaluation Plan. Apart from the position of M&E Director in the LTA, only the DR Congo Component had an M&E staff. This means that in the other components no project staff had specific responsibility for monitoring (although UNDP Zambia CO made their M&E Officer available to the PMU at times to support M&E activities). On the other hand, M&E budgets appear to have been set aside in some cases. With the exception of the DR Congo Component, there were no explicit Baselines although Zambia set about trying to establish baselines at the start of the project. Many of the so-called Indicators were merely targets and did not satisfy the SMART criteria.

Overall planning for Monitoring and Evaluation at entry level was **Moderately Satisfactory (MS)**.

<sup>41</sup> Approximately 1,600 Tanzanian Shillings are equivalent to US\$1.00

<sup>42</sup> As UNDP rightly pointed out, Zambia reported some impacts/results from their intervention – e.g. changes in income level through AIG activities and other socioeconomic impacts. However, these are only "indicators" in retrospect and cannot be regarded as part of an M&E Plan.

## 4.5.2 Monitoring tools

A range of tools was employed by the project to monitor project progress and achievement – which tool was used depended on who was using it.

UNDP personnel and officials from government organizations used the “back-to-office” report format following their visits to project locations. The visits usually coincided with PSC meetings (which were the main purpose of the visit) and the reports often focussed on matters that came up for discussion at the PSC meeting. While they could be claimed to provide a degree of oversight of the project activities, back-to-office reports were not the most effective monitoring tools.

The Project Steering Committee meetings could be seen as a monitoring tool. The meetings were meant to be at regular intervals, and the PM reported on project progress. The basis for the PM’s reporting to the PSC was the latest project Quarterly Progress Report and through their regular frequency and format, QPRs served as an effective tool for monitoring project progress.

UNDP acquits itself of its accountability to the GEF through the annual Project Implementation Review (PIR). The PIR exercise, which was coordinated by the RTA, was contributed to by each of the five components. PMs and other key project personnel together with representatives of the IA, the EAs and governments, came together in a PIR meeting which served as an excellent forum for mutual exchange of information and updating. Three PIRs have been prepared in this way, in 2010, 2011 and 2012.

As the first one, PIR2010 could be expected to set the scene for the project but it is not as helpful as it could be. Under the CO section, both Tanzania and Zambia are reported as commenting on the lack of a baseline and its importance for monitoring. The section on Progress towards the Development Objective (DO) makes an attempt to establish baselines and under Rating of Progress towards the DO, the PRC flags the need for budget reallocations, but these are not quantified. The IP Rating section seems to be reporting only on Tanzania. The Critical Risks section does not focus on risks but gives three stresses instead with very weak responses. No adjustments were precipitated (no adaptive management).

In PIR2011, the RTA section recognizes overall risk rating as “Substantial” and notes that the project strategy has been adjusted (but no indication of the adjustment). While the Tanzania and Zambia components are covered under CO section, there is no equivalent for the other two countries. Under the Rating of Progress towards the DO, the PRC refers to “*Progress made towards achieving outcome 4 marginally satisfactory, with monitoring activities ongoing at national levels in Burundi (water quality), DRC (sedimentation), Tanzania (water quality) and Zambia (sedimentation), but regional framework not available yet*” – the results of this monitoring have not been sighted by the evaluator.

The RTA section is blank in the PIR 2012. Of particular interest in this PIR is the reference to the specific targeting of women for project activities in the DR Congo Component.

One notable monitoring tool which was used by the WWF in DR Congo was satellite imagery to record and validate their extensive tree plantings. As explained in the PMU Terminal Report, an elaborate method was applied, with estimated overall accuracy between 81 and 87%. Mapping reforestation especially of young forest is complicated for several reasons. First the reforested areas are generally small and rare over the whole focal area. Secondly, the information about the exact location of the reforested areas is less important than the mapping of the spatial dynamics and the intensity of the deforestation process. The maps produced showed that the area of plantations that were detectable by July 2012 was 695ha. The slightly lower than expected detectable changes can partly be explained by the fact that part of the plantation was established after this period. In addition, it is likely that the small trees planted may not be detected.

### 4.5.3 Comprehensive assessment of M&E

A more specific indication of a project's compliance with the GEF M&E expectations is provided by the instrument of assessment used by the GEF itself which states that – *a project needs to be in compliance with all the critical parameters and needs to perform sufficiently well on all the parameters together. To be classified as compliant, projects are required to score at least a 2 (on a scale of 1 to 3, with 3 being the highest) on each of the critical parameters and to have an aggregate score of 26 out of a maximum of 39.*<sup>43</sup>

**Table 15. Instrument for assessment of M&E Plans for the comprehensive project**

PARAMETERS	RAW RESPONSE AND POSSIBILITIES	PROJECT SCORE	
1 Is there at least one specific indicator in the LogFrame for each of the project objectives and outcomes?	Yes No	3 1	2
2 Are the indicators in the LogFrame relevant to the chosen objectives and outcomes?	Yes Yes, but only some are relevant No	3 2 1	2
3 Are the indicators in the LogFrame sufficient to assess achievement of the objectives and outcomes?	Sufficient Largely Sufficient Some important indicators are missing	3 2 1	1
4 Are the indicators for project objectives and Outcomes quantifiable?	Yes Some of them are No, or else it has not been shown how the indicators could be quantified	3 2 1	2
5 Has the complete and relevant baseline information been provided?	Yes, complete baseline info provided Partial info but baseline survey in 1st year No info but baseline survey in 1st year Only partial baseline information No info provided	3 2.5 2 1.5 1	1.5
6 Has the methodology for determining the Baseline been explained?	Yes No	3 1	1
7 Has a separate budget been allocated to M&E activities?	Yes No	3 1	2
8 Have the responsibilities been clearly specified for the M&E activities?	Yes, and clearly specified Yes, broadly specified No	3 2 1	1
9 Have the time frames been specified for the M&E activities?	Yes, for all the activities Yes, but only for major activities No	3 2 1	2
10 Have the performance standards (targets) been specified in the log frame for the project outputs?	Yes, for all the outputs Yes, but only for major outputs No	3 2 1	2
11 Have the targets been specified for the indicators for project objectives and outcomes in the log frame?	Yes, for most Yes, but only for some indicators No	3 2 1	2
12 Are the specified targets for indicators of project objective and outcomes based on initial conditions?	Yes, for most Yes, but only for some of the indicators No	3 2 1	2
13 Do the project documents mention having made a Provision for mid term and terminal evaluation?	Yes, both mid term and terminal evaluation Only terminal evaluation Only mid term evaluation No information provided	3 2.5 1.5 1	3
<b>TOTAL</b>			<b>23.5</b>

As a result of the lack of M&E Plan, lack of Baselines and weak Indicators, items 3, 6, 7 and 8 have scored below the required minimum and the GEF minimum M&E requirements are only partly satisfied. The aggregate score of 23.5 points is below the minimum aggregate score of 26 points.

The evaluator concludes that while the project did carry out some monitoring activities, these were not according to an effective M&E Plan and the design and planning of M&E is confirmed as **Moderately Satisfactory (MS)**.

<sup>43</sup> GEF Evaluation Office (2009) *Annual Performance Report 2008*. GEF Council Paper GEF/ME/C.35/Inf. 5, May 28, 2009

#### 4.5.4 The Mid-Term Evaluation

A comprehensive (whole project) Mid-Term Evaluation was carried out in September 2011 and a general conclusion was that *“It is a little too early to assess results, especially as four of the Components are behind schedule. Overall, the MTE finds that the Project has made good progress in Zambia, in DRC progress has been limited but this seems to have been turned around, in Tanzania progress has been limited but there are reasons to believe this is being turned around although some additional steps are necessary. The main weaknesses are with respect to the Burundi and regional Components, where interventions by the Project sponsors are needed to review/revise the Project structure and workplans. Regional coordination and momentum are weak.”*

The MTE rated the various components according to the set criteria as in the following table.

**Table 16. Ratings given to the various components by the MTE**

CRITERIA	COMPONENT					SUMMARY
	Tanzania	DRC	Zambia	Burundi	Regional	
Achievement of objectives and planned results	U	U	S	U	U	Moderately Unsatisfactory (MU)
Attainment of outputs and activities	MU	U	S/HS	U	MU	Moderately Unsatisfactory (MU)
Cost-effectiveness	MS/MU	MS	S	S	U	Moderately Satisfactory (MS)
Impact	U	U	S/MS	MU/U	MU	Moderately Unsatisfactory (MU)
Sustainability	MU	MS/MU	MS	MU	U	Moderately Unsatisfactory (MU)
Stakeholders participation-formulation	MS	MU	MU	U/HU	S	Moderately Unsatisfactory (MU)
Stakeholders participation-implementation	S/MS	S/HS	S/HS	MS/MU	MS	Satisfactory (S)
Country ownership	S	MS/MU	S	MS	MS	Moderately Satisfactory (MS)
Implementation approach	MU	S/MS	S	U/HU	U	Moderately Unsatisfactory (MU)
Financial planning	MS/MU	MS	MS/MU	S	MU	Moderately Satisfactory (MS)
Replicability	MU	MU	S/MS	U	MS	Moderately Unsatisfactory (MU)
Monitoring and Evaluation	S/MS	MU	MU	MU	S	Moderately Satisfactory (MS)
Conceptualisation	MU/U	MU	MS/MU	MU	U	Moderately Unsatisfactory (MU)
<b>COMPONENT OVERALL RATING AS CALCULATED BY TE EVALUATOR</b>	<b>MS</b>	<b>MS</b>	<b>S</b>	<b>MU</b>	<b>MU</b>	

Clearly, the Burundi and the Regional components had not performed well at the half-way stage of the MTE and this evaluation has paid special attention to these two components.

**Table 17. MTE ratings per Objective and Outcomes**

OBJECTIVE/OUTCOME	RATING OF PROGRESS TOWARDS OBJECTIVES AND OUTCOMES	RATING OF PROJECT IMPLEMENTATION
<b>Project Objective:</b> To implement the prioritised activities of the SAP so as to achieve sustainable management of the environment and resources of LT	Moderately Unsatisfactory	Moderately Unsatisfactory
<b>Outcome 1.</b> Regional and national institutions established/strengthened to internalize the SAP and FFMP implementation	Moderately Unsatisfactory	Unsatisfactory
<b>Outcome 2.</b> Water quality of the Lake Tanganyika improved at two identified pollution hotspots through wastewater treatment in Burundi and Tanzania	Unsatisfactory	Unsatisfactory
<b>Outcome 3.</b> Sediment discharge reduced from demonstration catchment management sites, leading to the improvement of lake habitat significant livelihood and the improvement of local communities	Moderately Unsatisfactory	Moderately Satisfactory
<b>Outcome 4.</b> Lake monitoring system established, contributing to the better regional and long-term sustainable management of the Lake Tanganyika	Moderately Unsatisfactory	Unsatisfactory
<b>OVERALL PROJECT RATING AS CALCULATED BY THE TE EVALUATOR</b>	<b>MU</b>	<b>MU</b>

The above represent ratings for effectiveness (progress) and efficiency (implementation) and both are of concern. In effect, this has been the baseline for the current TE.

Following its conclusions as represented by the above ratings, the MTE made a number of recommendations tagged specifically to the various components and a Management Response was prepared at the component level to each respective batch of recommendations. This evaluator finds the number of recommendations somewhat excessive and some at the micro level. However, the Recommendations together with their respective management responses, were provided in a template to the PCU and the PMUs with a request to provide an update on the actual action taken in response to the MTE recommendations. The full tables are in Annex 7 and following is a summary of the responses and actions arising, on a component basis –

At the **Overview** level, all four recommendations were accepted and acted upon. Likewise, all seven recommendations made to the **Regional Component** were accepted, however, only three were actioned outright. The other four were either only partly implemented or the point of the recommendations was not understood. The four recommendations to the **Burundi Component** were all accepted or partly accepted, but none were implemented outright. In fact only one was partly carried out – the MTE recommended support of the LTA, the PMU provided information sharing. A corollary of “other issues” for Burundi brought up the matter of slow delivery by KEOC and the rising need for a further extension. There were five recommendations to the **DR Congo Component** and of these, two were not really accepted and the issue was side-stepped. This related to better collaboration between the UNDP/GEF project and PRODAP at site level. The **Tanzania Component** received six recommendations of which two were not accepted. The rest, while accepted, were either not carried out at all or only partly so<sup>44</sup>. All four recommendations to the **Zambia Component** were accepted but one was not really actioned.

## 4.6 UNDP as Implementing Agency

The role of UNDP as the GEF Implementing Agency for this project represented a slightly different approach from usual, reflecting the specific and complex nature of this project. Two out of four Country Offices were involved directly in project execution (through the NEX/NIM modality) while the other three components were the subjects of agency execution by UNOPS, and there was no lead Country Office to perform the role of IA. As a result of these complexities, the RTA and the UNDP Regional Office provided far more support than is usual. There were efforts to ensure that the project remained as one regional project, despite the fact that in effect there were three different UNDP projects administratively with various execution modalities. For example, the three projects collectively produce one PIR annually; and evaluations were timed and coordinated as much as possible to maintain the cohesion among the three projects. The RTA also established and maintained a good working relationship with other partners, but most notably with AfDB, so as to coordinate support to the LTA and the countries as much as possible.

More specifically, the UNDP/GEF Regional Office provided technical support to the UNOPS components and the UNDP COs in Tanzania and Zambia as well as to the Government GEF Operational Focal Points. It also assisted the respective executing agencies with the recruitment of senior project personnel, approved the project inception reports and terminal reports, reviewed budget revisions prior to signature, followed up closely on implementation progress, assured the eligibility of project interventions in light of GEF policy guidance and approved project design, represented UNDP/GEF on the PSCs, and approved annual PIRs, including performance ratings, for submission to GEF. To fulfil these responsibilities, the RTA remained fully engaged in the project implementation and in close communication with UNOPS, the UNDP COs, the Implementing Partners, the PCU and the PMUs.

As Implementing Agency, UNDP was responsible to the GEF for the timely and cost-effective delivery of the agreed project outcomes. It achieved this through its understandings with the four

<sup>44</sup> The VPO view is that “most of the recommendations were accepted and taken on board. Strategies to implemented were developed and implementation has been ongoing throughout the implementation.”

Governments and its contractual arrangements with its implementing partners – UNOPS for the Regional, Burundi and DR Congo Components, the Vice-President's Office for the Tanzania Component and the MLNREP for the Zambia Component. UNDP had an obligation to ensure accountability, and its efforts in this respect for this project were spearheaded by the RTA and the respective Country Offices in Dar es-Salaam and in Lusaka. As IA, UNDP was responsible for monitoring progress and reporting back to the GEF. This responsibility was shared with the Executing Agencies and was exercised through full participation in PSC meetings, consideration of AWP and Budgets, visits to project sites and the annual PIR.

The role of UNDP in this project also extended into co-financing and the Country Offices in Dar es-Salaam and Lusaka have made, and will make (for extensions), significant cash contributions. Although not directly involved in project execution, the UNDP Country Offices in Kinshasa and Bujumbura were also highly supportive. For example, when the DR Congo Component was going through some difficult times, the CO was effectively used to discuss and clear some issues at the Ministerial level. In Burundi, the CO worked with the PRC and the TA and ensured that the project remained relevant to the UN support in Burundi. The CO also alerted the PCU and the PMU about resource mobilization opportunities.

UNDP performance as Implementing Agency for this complex project is rated as **Satisfactory (S)**.

## 4.7 Executing Agencies and partners performance

### 4.7.1 UNOPS-IWC

The main Executing Agency for the project was UNOPS-International Waters Cluster (IWC) with its responsibility for the implementation of three out of the five project components, including the Regional Component. And although UNOPS-IWC engaged WWF for the implementation of the DR Congo Component and the PCU to oversee the Burundi Component, it remained the agency accountable for project execution in both these components as well as the Regional one. There were numerous exchanges of emails to determine the EA fee and there was the ProDoc which was signed by both UNDP and UNOPS (in addition to the governments), but there did not seem to be any formal, written agreement between UNDP and UNOPS specifically for this project. The lack of a formal agreement, even between sister agencies of the UN system, has been recognized as being risky and the evaluator was advised that UNDP and UNOPS are currently undertaking an initiative to further systematize cooperation arrangements through the setting-up of a responsibility matrix which reflects the involvement of the Project Management Unit, UNDP RTA, UNDP CO if applicable, and UNOPS. In addition, a set of Standard Operational Procedures is currently in draft and regular meetings are being held to review the institutionalization of overall cooperation.

IWC is the dedicated UNOPS cluster for IW projects. It provides specialized services to partners such as the United Nations Development Programme (UNDP), the Global Environment Facility (GEF), the United Nations Environment Programme and the World Bank and it is executing over 30 international waters projects on behalf of these partners in more than 100 countries, amounting to approximately USD148 million<sup>45</sup>. IWC comprises specialized expertise in overall project management, procurement, human resources, budget and finance, and payments and it serves as a neutral management agent able to concentrate the discussion away from political issues and on to the technical and managerial aspects. A broad range of specialized management tools are available for the successful management of projects. IWC carries out regular training in identified areas with the Project Management Units in the field. A solid management basis with appropriate guidelines and tools has been set up in UNOPS over the past 5-6 years and this has earned UNOPS ISO 9001 certification.

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<sup>45</sup> see [http://www.unops.org/SiteCollectionDocuments/Factsheets/English/focus-areas/GBL\\_FAFS\\_IW\\_EN.pdf](http://www.unops.org/SiteCollectionDocuments/Factsheets/English/focus-areas/GBL_FAFS_IW_EN.pdf)

As the EA for three components, UNOPS-IWC was responsible for the monitoring of project progress and it did this primarily through the PCU which served as the UNOPS presence in the region<sup>46</sup>. In addition to participating in PSC meetings and staying involved in the PIR exercise (at least in the early days of the project), IWC carried out two monitoring missions to the region but no formal reports were produced.

Reports from various sectors confirm a very good working relationship with UNOPS, and UNOPS itself described its relationship with UNDP as “*excellent*” and says that its cooperation with WWF has been “*very easy*.” However, there has been one exception – IWC relationship with its sister unit within UNOPS, namely KEOC. The decision to engage KEOC in the management of the sewer reticulation system work in Buyenzi was taken by IWC based on the extensive experience in the management of infrastructure projects by KEOC, including dedicated expert personnel. While IWC transferred the management of the entire component to KEOC, the accountability for its success remained with IWC who advised the evaluator that inter-divisional communication with KEOC had been difficult and subsequent information exchange with the PMU, UNDP and the government have been a serious challenge. This would require improvement for future arrangements.

#### **4.7.2 VPO for the Tanzania Component**

The Vice-President’s Office (VPO) served as the Executing Agency for the project in Tanzania with the Division of Environment of the VPO providing the coordination role between sector ministries as well as forming a link to the PCU. For operational purposes the VPO also provided the linkages with the other riparian countries through the regional office. Two staff at the VPO (one of them designated as the project focal point) were to allocate approximately 25% of their time to project activities and carry out regular monitoring and evaluation – they comprised the Project Monitoring and Coordination Team.

According to the ProDoc, as the Executing Agency, the VPO was to seek to maintain the existing collaboration with government ministries and other agencies at national level in the implementation of the project – these included: MNR&T, the Ministry of Agriculture, the Ministry of Water and Livestock Development, Sokoine University of Agriculture, Institute of Resources Assessment, the private sector and relevant non-governmental organizations. UNDP advised that the ministries were involved in the PSC, they actively participated in meetings and provided guidance for the project.

The VPO was also charged with selecting the members of the Project Steering Committee (PSC) and act as chair for the PSC. From the minutes of PSC meetings the PSC appears to have been well led and it achieved its intended governance role.

Among other things, the evaluator invited the VPO to comment on the lack of uptake of the NDF loan under the PRODAP project for the construction of the wastewater treatment plant in Kigoma, but this opportunity was not taken up. This was unfortunate because the VPO, in its position of Executing Agency, was accountable for the delivery of project outcomes one of which was – *Wastewater management at Kigoma – Ujiji Township strengthened, reducing point pollution levels of Lake Tanganyika waters and so improving biodiversity habitats*. While the UNDP/GEF project was only expected to contribute the “soft” capacity and expertise for the treatment plant to be managed, and it did this, without the construction of the treatment plant, its benefit was lost and the outcome remained unattained.

#### **4.7.3 MLNREP for the Zambia Component**

The Ministry of Lands, Natural Resources and Environment Protection (MLNREP) was an effective Executing Agency for the Zambia Component which was nationally executed.

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<sup>46</sup> The Project Regional Coordinator has a delegation of authority (DOA) level of USD50,000.



The MLNREP, being the focal point for all-environmental and natural resources management issues in the country, was the natural choice through the Department of Environment and Natural Resources Management which became responsible for coordination and guidance and performance monitoring of the project in its progress towards the planned outputs. As the Executing Agency, MNLREP was also responsible for parallel functions for the AfDB-supported fisheries component for which a separate PIU was set up in Mpulungu. This allowed the MLNREP to ensure that the implementation of the two (GEF and AfDB) components were coordinated as effectively as possible at both national and district levels.

As the EA, the MLNREP maintained and enhanced collaboration with several other government ministries and agencies at both national and district levels in the day-to-day implementation of the project. These included: the Environmental Council of Zambia, the Zambia Wildlife Authority, the Ministry of Agriculture and Cooperatives, the Ministry of Energy and Water Development and relevant NGOs. These institutions were called upon to support the MLNREP in the execution of the project starting at the governance level of the PSC and the local PMC through to the National Advisory Task Force which was set up for the project.

#### **4.7.4 World Wildlife Fund, Eastern & Southern Africa Office (WWF)**

The plan according to the ProDoc was for the project “*to be implemented through UNOPS, with UNOPS subcontracting a consortium/a of experts to work in collaboration with DRC government and the Uvira Region / Uvira Municipality Agencies.*” In effect, the DR Congo component was managed by UNOPS through its Regional Project Coordination Unit (PCU) in Bujumbura, Burundi, with administrative support from the UNOPS Europe and Middle East Office in Copenhagen, Denmark.

Following an open tender process, WWF was sub-contracted by UNOPS in June 2010 to implement catchment management activities in the Uvira region, South Kivu District on behalf of the DR Congo Government. This was two years after the overall project had started and left WWF with a mere two years to complete the entire targeted programme of activities.

DR Congo government officials were unhappy with WWF serving as the executing agency on the ground – they were seen as “people from Nairobi.” However, after repeating this concern to the evaluator, they expressed their recognition that WWF had done a good job, the project had been successful and the results were very satisfying. The assessment by the evaluator confirmed this positive view. WWF were found to be well organized, technically skilled, with good backstopping and support – a very professional agency. They managed to turn around a project which, in DR Congo, had started late, and made good progress towards the project targets in spite of the often difficult situation, in only half the time.

#### **4.7.5 UNOPS Kenya Operations Centre (KEOC)**

KEOC is not strictly speaking an executing agency, however, as it commanded the greater majority of the Burundi Component budget (US\$1.033 million out of US\$1.8 million) it is seen as sharing the responsibility for project execution with UNOPS-IWC in Burundi.

KEOC’s role in the project was the subject of an internal arrangement with UNOPS-IWC of EMO division. Through this, KEOC was to construct *a tertiary wastewaters network* in Bujumbura. The agreement also notes that the work will be *as per ProDoc* and in the version made available to the evaluator, the ProDoc states under Output 2.1: *The Wastewater Treatment Plant Network in Bujumbura City is connected to major effluent sources (industrial and domestic) to reduce raw discharge to the lake.*



One issue which has clouded KEOC's performance and delivery was its inability (or unwillingness) to provide IWC, UNDP, the PCU or the PMU with regular statements of progress, expenditure and remaining works. This was the subject of a formal written request from UNDP to UNOPS (on 25 March 2013) and from this evaluator to UNOPS-IWC and KEOC (on 22 April 2013). KEOC did not reply to the evaluator<sup>47</sup> and the reply from UNOPS-IWC was not entirely helpful.<sup>48</sup>

KEOC's task was influenced by the government decision<sup>49</sup> to opt for a secondary connection system in Buyenzi by the project, leaving the tertiary connections to be made by the government through another initiative. Subsequently, there was a change in the government position and tertiary connections were once again the target for delivery. While these changes on the part of the government may have slowed things down for KEOC, it is widely felt that they did not explain fully the delays encountered by the project<sup>50</sup>.

The evaluator has now been advised that the change order for construction work termination with the connection of households to the wastewater system has been issued, the contractor has made a start on the outstanding works and is committed to completing the works by the end of July 2013 at the latest. The overall contract cost is given as about USD750,000, with additional resources dedicated for design, planning, oversight, and engineering expertise to ensure quality completion of the works. The drawings and calculations provided informally to the evaluator, indicated that the new work was estimated to cost some USD267,855. However, if the original budget allocated for this work was \$1,033,671, and if the on-going work is worth USD446,591, this leaves \$319,225 as unaccounted for. A request by the evaluator on how the \$1,033,671 has been spent, and why the new works are not to the value of \$587,000 has gone unanswered<sup>51</sup>.

#### 4.7.6 World Agroforestry Centre (ICRAF)

ICRAF was pre-identified as a technical partner in the ProDoc in recognition of its expertise in similar situations in the Lake Victoria Basin. According to its Inception Report, ICRAF *"has accumulated the expert knowledge, through its experience on the ground in the region, on how the project could best promote catchment management practices that address both environmental concerns (i.e. sedimentation control) and socio-economic concerns (including viable proposals for alternative livelihood, etc.) of local communities in the Lake Tanganyika Basin"*.

Its involvement in project implementation was as a consultant through a contract issued by UNOPS which focussed on the lake catchments of Tanzania, Zambia and DR Congo. It was noted that GEF resources had not been allocated for any work in Burundi. However, it was acknowledged that *"deforestation, soil degradation and unsustainable agricultural practices are also significant problems in the Burundi area"*, and that Burundi should at least be included in *"knowledge sharing and awareness raising activities"*. Unfortunately, workshop plans and budgets seen by the evaluator do confirm that Burundi participants may attend, but at their own cost and this is hardly conducive or realistic.

From the documentation made available to the evaluator and from discussions held, the evaluator was impressed by the large number of ICRAF personnel listed as involved. It was also noticeable that ICRAF has been very active on the ground and was mentioned often by stakeholders in Uvira who were grateful for the interventions, except for one who has been carrying out sediment

<sup>47</sup> According to UNOPS, KEOC did not consider it appropriate to communicate with the evaluator!

<sup>48</sup> In reply to questions regarding the number of households actually connected at present and forecast to be connected by the end of the project, UNOPS-IWC could only provide reference to further work leading to *"capability and potential"* for household connections but no certainty.

<sup>49</sup> As agreed by the implementing partners at a meeting in Nairobi on 05 December 2011.

<sup>50</sup> For example, UNDP noted that *"To this date, none of us received any explanation from UNOPS why it took more than 1/2 a year to advertise the tender for the secondary work since we received the letter from BDI Govt in Jan 2012"*

<sup>51</sup> KEOC (through UNDP) has forwarded the latest weekly report by the Contractor (for the week 03-08 June) and this update is reflected in assessment of results achieved in section 5.2.2.

monitoring diligently and sending results to ICRAF with no feedback! ICRAF was also very prolific in the production of documents such as manuals, guidelines, and workshop reports. However, the evaluator has not sighted a final report<sup>52</sup> which could have confirmed the execution of the main tasks as in the contract.

#### 4.7.7 International Union for the Conservation of Nature (IUCN)

IUCN was identified as a donor partner in the ProDoc which was to co-finance lake monitoring under Outcome 4 to the confirmed amount of USD1.0 million. As explained by IUCN to the evaluator, this was based on the expectation that the Water and Nature Initiative (WANI) would continue into a well-funded second phase. So sure was IUCN that this support would be forthcoming that IUCN “lent” funds to the process of establishing the LTA and its offices and negotiating for the convention, etc – because IUCN believed that was of paramount importance. When support from WANI-2 failed to materialize, there were no funds left for co-financing and the little left for biodiversity studies and monitoring had shrunk.

IUCN involvement in the project was reassessed and took the form of a sub-project under contract with UNOPS with the Objective *“To contribute towards the establishment and implementation of a programme to assess and respond to existing and potential threats of invasive species in Lake Tanganyika and its catchment.”*

Surveys, training sessions and a handbook publication followed by stretching a much reduced budget as far as it could go. However, in effect, the result cannot be described as a programme to assess and respond to invasive species threats.

IUCN expressed some reservations regarding the promotion of some exotic species by ICRAF and lamented the lack of interaction between the agencies involved in project implementation on the ground. Some of the causes of this were seen to lie with the PCU.

The performance of partners serving as Executing Agencies and sub-contractors ranged from Unsatisfactory to Satisfactory, with the latter pushing the overall balance towards **Moderately Satisfactory (MS)**.

## 5 FINDINGS: RESULTS ACHIEVED – EFFECTIVENESS

### 5.1 Achievement of the overall Objective

The original project Objective from the ProDoc was – *To implement the prioritised activities of the Strategic Action Programme so as to achieve sustainable management of the environmental resources of Lake Tanganyika*

According to PIR2010, this was expanded to read – *The implementation of the prioritised activities of the Strategic Action Programme (SAP) to improve local livelihoods by protecting biodiversity and achieving integrated sustainable management of the natural resources of Lake Tanganyika; thereby contributing to the global environmental concerns and commitments integrated in national development planning and policies (UNDP Strategic Results Framework higher level outcome).*

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<sup>52</sup> Among the docs provided, the one labelled Final Report comprised a bundle of mainly manuals, guidelines, etc.

While it is most unusual for the wording of a GEF project objective to change, the different wording is more of an expansion than a substantive change although there is a slight change of emphasis; however, it is unfortunate that the project is now expected to “contribute to global environmental concerns” (sic), and this slip should not have happened in a PIR.

The primary target of the objective was the implementation of SAP activities; the ultimate targets were – improvement in local livelihoods and sustainable management of environmental resources.

The primary target was attempted by the project in the form of sediment and wastewater, and they were partly achieved. In fact, the threat arising from sediment inflow was addressed effectively especially in Mpulungu and Uvira; however, the wastewater threat was less successfully addressed at either of Kigoma or Buyenzi. The project duration was far too short and it is far too early to determine whether the result of sustainable management has been achieved; however, there is evidence to show that the result of improvement in local livelihoods has been achieved, albeit on a very restricted scale, in Mpulungu, Uvira and Kigoma.

The five Indicators selected to assist with the measurement of progress towards the Objective are critiqued below.

**Table 18. Critique of the indicators selected for the Objective in PIR 2010**

INDICATORS FOR THE OBJECTIVE AS IN PIR2010	CRITIQUE BY THE EVALUATOR
1 Convention on Sustainable Management of Lake Tanganyika ratified, Lake Tanganyika Authority (LTA) established and functioning with support from UNDP/GEF Project Regional Coordination Unit (PCU) and national Project Management Units (PMU's) in order to implement and update the SAP (also see Outcome 1 and Outcome 5).	Neither of the two versions of the Objective mentions the Convention or its protocols, or the LTA, or the PMUs and therefore these cannot be used as an indication of whether the Objective has been achieved. In fact, they create the danger that although the Indicators may be “achieved”, the Objective is not. The Objective sought the implementation of priority SAP activities, improvement of local livelihoods, and integrated sustainable management, and this is what the indicators should have focused on. The role of indicators is misunderstood to the extent that Indicators 1 and 2 are lists of project Outputs; Indicator 3 is a repetition of the wording of Outcome 2 slightly altered; Indicator 4 makes a weak connection with one of the SAP priorities; and Indicator 5 is an output of Outcome 4 which has a slight connection with the Objective. None of the so-called indicators is fully SMART. Only 4 and 5 are partly <b>Specific</b> to the Objective. None is quantifiably <b>Measurable</b> but they may be <b>Achievable</b> and 1, 2 and 5 may be <b>Attributable</b> to the project. They are only indirectly <b>Relevant</b> to the Objective and difficult to <b>Track</b> because of incomplete baselines.
2 Finalised draft protocols to the Convention, and recommendations towards regionally harmonized environmental policies, regulations, and development frameworks submitted to the LTA by 2011 (also see Outcome 1).	
3 The quality of the water of Lake Tanganyika is improved at two identified pollution hotspots (see Outcome 2).	
4 Sustainable catchment management interventions begin to be replicated in the region (see Outcome 3).	
5 Regional environmental monitoring programme developed and functioning, offering decision-making support to foster the sustainable management of the natural resources in the lake basin (see Outcome 4).	

Only partial progress has been made towards the project Objective, however, and in spite of the weak and unhelpful indicators, the effort overall has been commendable and merits a rating of **Satisfactory (S)**. This is a significant improvement on the rating obtained at the time of the MTE and reflects the “turn around” that has been achieved.

## 5.2 Project products at the component level

### 5.2.1 Regional Component and the overall project Outcomes

As noted elsewhere, the project targeted four Outcomes, two of which (1 and 4) were exclusively the responsibility of the PCU. The other two, while being addressed primarily by the other four national components, were also contributed to by the PCU. It is therefore convenient to assess the Regional Component and the overall achievement of the project Outcomes together.

**Table 19. Analysis of the activities, targets and indicators for overall Outcomes, and progress achieved**

OUTCOMES <sup>53</sup>	INDICATORS AS IN PIR2010	CRITIQUE OF THE INDICATORS AND THEIR RELEVANCE TO THE OUTCOME	RESULTS AS REPORTED BY THE PCU <sup>54</sup>	EVALUATOR'S COMMENTS AND RATINGS
<p>1 Regional and national institutions have internalized the implementation of the SAP and provide institutional support for the cooperative management of Lake Tanganyika under the ratified Convention</p>	<p>1.1 LTA Secretariat and Interministerial Committees operational by 2009.                      1.2 Protocols to the Convention drafted, setting regional standards for water quality and other environmental parameters.                      1.3 Recommendations exist for the regional harmonization of policies and regulatory frameworks for sustainable environmental management.                      1.4 SAP updated by 2010, responding to changes in threats to the biodiversity and natural resources of the Lake Tanganyika basin.                      1.5 Additional resources mobilized for prioritized activities.                      1.6 Communication and information resource developed and maintained at regional level, enabling exchange of knowledge and data relevant to the sustainable management of the</p>	<p>Seven indicators for one outcome is too many. But these are not really indicators of whether the Outcome has been achieved – they are outputs and activities. Even if they were all to be achieved, the Outcome may still not be achieved<sup>55</sup>.</p> <p>If they were indicators, they would not be SMART. At best, they are only partly <b>Specific</b> to the Outcome. Apart from 1.7 they are probably <b>Measurable</b> and they may be <b>Achievable</b> but it may not be easy to <b>Attribute</b> them to the project. 1.1, 1.3, 1.6 and 1.7 are partly <b>Relevant</b> to the Outcome but the others are not. They are all easy to <b>Track</b> because they are tangible outputs.</p>	<p>Draft Protocols: The Protocols cover the following strategic areas: (1) Fisheries Management (2) Sustainable Land Management (including environmental monitoring)(3) Protection and restoration of critical habitats(4) Control and prevention of Biological Invasions. (5) Reduction of pollution and improvement of water quality</p> <p>An Updated Strategic Action Programme that spells out the topical issues that need addressing in Lake Tanganyika and its basin as well as potential areas that could be considered for funding by would be donors</p> <p>SAP has been internalised. The updated SAP adopted by the February 2012 CoM is a major reference document in all the member states. After its approve by the CoM, stakeholder institutions in the member states are actively using it in there planning using it as reference material to design their internal strategies. In addition, National Action Plans that operationalize the SAP have been developed in each country. The project updated the SAP and facilitated its internalisation in the planning processes of the 4 countries</p>	<p>The project aimed for the <i>SAP to be internalized at country level</i> and for <i>Cooperative management</i> to be taking place under the Convention.</p> <p>The drafting and adoption of the NAPs by each of the four countries is a sign that the SAP has been internalized and that implementation has begun. However, cooperative management of lake resources remains elusive – there are plenty of opportunities for the four countries to work together, share experiences, resolve mutual problems, and attain mutual benefits. The project has prepared the way for this and the Outcome has been partly achieved – <b>Moderately Satisfactory (MS)</b>.</p>

<sup>53</sup> The ProDoc and PIR2010 showed an Outcome 5: *Project efficiently and effectively managed, monitored and evaluated*. As this is not an Outcome it is not taken into account here but it is assessed under Section 4 Findings: Project Implementation.

<sup>54</sup> From the draft Terminal Project Report, and the Self-Assessment for this evaluation, both provided by the PCU.

<sup>55</sup> UNDP puts forward the view that “*outputs (when designed well) should act as SMART indicators for an outcome. That is why indicators listed here are (mostly) indented outputs.*” The evaluator does not share this view.

	natural resources in the Lake Tanganyika basin. 1.7 Management responsive M&E processes established at the national and regional level.			
2 The quality of the water of Lake Tanganyika is improved at two identified pollution hotspots through enhanced wastewater management.	2.1 Capacity for wastewater treatment in Bujumbura (Burundi) increased by improving pipeline structure and SETEMU facility. 2.2 Capacity for wastewater management in Bujumbura increased by targeted training of SETEMU and INECN laboratory and management staff. 2.3 Capacity for wastewater management in Kigoma (Tanzania) increased by development of plans, guidelines and targeted training of KUWASA staff. 2.4 Discharge standards developed for Burundi. 2.5 Water quality monitoring systems in place and linked to the regional environmental monitoring programme of Lake Tanganyika. 2.6 Effluent from wastewater treatment is significantly better across key parameters than non-treated wastewater.	There should have been fewer indicators, much fewer; and they should have focused on actual water quality and wastewater management. The ones provided are not really indicators and 2.2, 2.3 and 2.6 actually need indicators themselves! Only 2.6 would indicate what the Outcome is targeting, the others are mere preparatory and even if they were to be achieved, the water quality would still not be improved.  If they were indicators, they would not be SMART. Only 2.6 is <b>Specific</b> to the Outcome. None apart from 2.4 and 2.5 are <b>Measurable</b> and difficult to know if they have been <b>Achieved</b> . On the other hand, they are <b>Attributable</b> to the project. All are partly <b>Relevant</b> to the Outcome but capacity is notoriously difficult to <b>Track</b> .	Standards for Waste water management in Burundi and the Waste Water management Strategy for Kigoma and Ujiji Municipal Councils.  Wastewater is now treated though there is room for improvement. The project has played a key role to sensitise the Municipality authorities in Bujumbura and Kigoma/Ujiji. In Bujumbura at the start of the project only 6000 cubic metres of waste water was treated but now after sensitisation by the project of all key industries in the city 11,000 cubic metres of waste water is treated. There has been some improvement in water Quality. This is very sustainable because the project has helped the government of Burundi to develop waste water standards that they will use to identify polluters who they would then force to treat waste water. In addition the Government of both Burundi and Tanzania have taken it upon themselves to monitor water quality and the major polluters (industries).	The project was looking for a very simple result – <i>Water quality improvement at two locations</i> . The six Indicators, apart from being excessive, were focussing primarily on capacity, but capacity is not the result that was sought.  In Kigoma, the project relied on a co-funded activity which did not eventuate. In Bujumbura a project extension has been required to allow connections of households to the sewer network and thus reduce the pollution entering the lake – this will be completed after this TE.  At the time of writing, this Outcome has not been achieved and must be rated as <b>Unsatisfactory (U)</b> . However, if KEOC delivers at Buyenzi, the rating could be considered as Moderately Unsatisfactory (MU)
3 Demonstration catchment management sites contribute to the reduction of sedimentation and provide significant livelihood benefits to local people, seeking long-term adaptation measures to changing climatic	3.1 Increased percentage of households in demonstration sites implementing sustainable landuse practices. 3.2 Increased amount of hectares planted with recommended tree species in pilot sites. 3.3 Increased number of households that benefit from environmentally friendly alternative income generation activities. 3.4 Capacity of communities to implement sustainable landuse practices enhanced through targeted training. 3.5 Increased number of households using fuel-efficient technologies. 3.6 Significant reduction in turbidity	As noted for the other Outcomes, fewer indicators would be better. Also, they should be focussed on reduction of sediment, livelihood benefits and adaptation to CC. Once again, the selected indicators do not focus on the Outcome but on the inputs, except for 3.6 which is relevant. As before, rather than indicators, these are activities and outputs – the building blocks for the Outcome, but even if they are all obtained, it is still possible for the Outcome not to be achieved. It is also interesting to note that 3.1 is in fact an indicator for 3.4	The Catchment management aspects: (a) Low input agriculture has been promoted in sites in Zambia, Tanzania and DRC where agriculture production has been enhanced through practical lessons demonstrated on Agriculture demonstration plots .Some of the techniques demonstrated and taken on by framers across the 4 countries include Green maturing using green Nitrogen fixing plant such as: (i)Inga edulis (Inga, or ice cream bean);(ii)Cajanus cajan (pigeon pea);(iii) Crotalaria sp. (sunn hemp);(iv)Sesbania sesban (sesban);(v)Samanea saman (monkeypod) and (vi)Gliricidia sepium (madre de cacao, rata maton) Sunhemp;  Other agriculture productivity improvement activities include Cassava planting techniques using the 12 hours method and Terrace farming  Mitigation measures against sedimentation have been demonstrated and taken on by farmers including storm drains and planting of vertical glass	The project was looking for <i>Sediment discharge reduction</i> , and <i>Significant livelihood benefits</i> and from the PCU reports there are good signs that both have been obtained. And, in spite of the lack of a clear baseline and the far too short timeframe of the project, the evaluator was advised of reduced sediment loads at the pilot sites and very successful AIGs supported through efficient revolving funds with significant livelihood benefits.  Outcome 3 has been achieved <b>Satisfactorily (S)</b> .

<p>regimes.</p>	<p>and sediment load parameters measured in target rivers within the catchment of demonstration sites.</p>	<p>rather than the Outcome.</p> <p>If they were indicators, they are the closest to being SMART. In general, they are <b>Specific</b> to the Outcome. All but 3.4 are <b>Measurable</b> and apart from 3.4 they are <b>Achievable</b> although it would not be easy to determine what is "significant" under 3.6. All apart from 3.6 are <b>Attributable</b> to the project. All are at least partly <b>Relevant</b> to the Outcome. All but 3.4 should be comparatively easy to <b>Track</b>.</p> <p>In summary, 3.1, 3.2, 3.3 and 3.5 can be considered as SMART; 3.6 is almost SMART; and 3.4 is not SMART</p>	<p>Planting of more than 2,000,000 of trees across the 4 countries to improve land cover and stop sedimentation as well as create carbon sinks to mitigate against Climate change</p> <p>Demonstrated reduction in sedimentation from the monitoring sites. Although studies by relevant institutions such as Water Affairs Department are currently on-going before conclusively attributing the reduction of sedimentation to the project interventions who, it is notable that sedimentation monitored between 2009 and 2012 indicates tremendous reduction in some of the sites where the project has been intervening. Zambia is a good example where the Department of Water Affairs has been monitoring sedimentation at 7 Gauging stations.</p> <p>Energy Efficient stoves: The project has achieved good outputs from the energy saving subcomponent where it has procured energy technology for high fuelwood consuming institutions such as the prisons, army and schools. A visit to Bangwe Prison within Kigoma town in July 2012 revealed that the stakeholders, in this case the prison officers and the prisoners highly appreciate the intervention by the project. The officer in charge of the prison informed the visiting team that before introduction of the energy efficient stoves, 15M3 of firewood was used every month. This has been reduced to between 4 and 5 M3 per month.</p> <p>In Uvira in DRC, The Energy saving stoves have become a household name and are manufactured by a local association as a business venture, who got initial funds to set up their venture from the project. The Energy saving stoves that has now become a serious business venture with a serious possibility of continuation beyond the life of the project since the Community are now doing this as a business venture from which they have so far raised around 10,000 USD for themselves, separate from the initial project support and there is a very high demand of the same stoves. The reduction in tree cutting that will arise from use of these energy saving stoves will have a significant positive result on the environment</p> <p>Livelihoods improvement has been achieved mainly through the many business ventures promoted by the project. In Zambia, a revolving fund with initial funding of <b>308,000 USD</b> has been set up and is being a stable permanent institution, The Zambia National Farmers Union (ZNFU). There are example of people within the project site whose annual income has been enhanced from <b>(500 USD per annum in 2009 at the start of the project) to 5000 USD per annum in 2011</b>from investment in ventures such as vegetable growing in a sustainable way.</p> <p>In Tanzania, the revolving fund has been set up through Micro-financing Institutions (VICOBA/SACCOs) that will continue to provide</p>	
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<p>4 Regional monitoring and management systems contribute to the long-term sustainable management of Lake Tanganyika and its natural resources</p>	<p>4.1 MoU signed between the LTA and National Monitoring Units (institutions in the riparian states) to institutionalize the necessary technical cooperation for a regional integrated programme to monitor parameters relevant to fisheries, water quality, biodiversity and catchment processes. 4.2 Capacity built of National Monitoring Units (equipment, targeted training) in order to participate in the regional monitoring programme. 4.3 National and regional online data management and dissemination system established. 4.4 Monitoring data response is reflected in adaptation of national and regional environmental management plans.</p>	<p>Four indicators is a better number but fewer would be even better and they should be focussed on the monitoring system and on sustainable management. The four indicators do focus on the Outcome but 4.1 and 4.3 are outputs and 4.2 is an activity. If all are obtained, it can be claimed that the Outcome has been achieved. Unfortunately, 4.4 is difficult to determine.</p> <p>If they were indicators, they are at least partly SMART. They are all <b>Specific</b> to the Outcome. 4.1 and 4.3 are <b>Measurable</b> and all are <b>Achievable</b> and <b>Attributable</b> to the project. All are <b>Relevant</b> to the Outcome. But 4.2 and 4.4 are not easy to <b>Track</b>.</p>	<p>A framework Strategy for Regional Integrated Environmental Monitoring that will involve a range of stakeholders under the coordination of the Lake Tanganyika Authority Secretariat to ensure that all activities undertaken on the Lake and in the basin do not have negative impacts on the Lake and its Biodiversity.</p> <p>Monitoring is taking place quarterly and the results of monitoring are used by managers. It is sustainable in that the Regional Integrated Environmental Monitoring Strategy is built around existing institutions and will be implemented within their mandates, normal operations and budgets</p>	<p>The Outcome sought <i>Regional monitoring and management systems</i> and the evaluator was looking for proof of regular monitoring and (adaptive) management.</p> <p>The evaluator is aware of a number of preparatory consultancies proposing various monitoring measures, and while some monitoring is known to have taken place, no monitoring "system" has been observed, and certainly not one which is producing data and information of use to managers and decision-makers. The draft Implementation Strategy, dated February 2012<sup>56</sup> is the latest document available to the evaluator – this is merely a proposal and the system has yet to be set up – this Outcome has only been partly achieved and is rated as <b>Moderately Satisfactory (MS)</b>.</p>
<p><b>Overall conclusions and rating for the Regional Component:</b> The achievement of the overall project Objective has been rated as Satisfactory (S) and of the four Outcomes targeted by the project, the first and the fourth were exclusively the responsibility of the Regional Component, and these have been rated as Moderately Satisfactory (MS). With a rating of Satisfactory (S) for Outcome 3, the project was in line for an overall rating of Satisfactory (S) but it has been dragged down by the rating of Unsatisfactory (U) awarded to Outcome 2, and the overall rating is <b>Moderately Satisfactory (MS)</b>.</p>				

<sup>56</sup> Plisnier, Pierre-Denis (2012) *Lake Tanganyika Regional Integrated Environmental Monitoring Programme : Draft Implementation Strategy*. UNDP/GEF Lake Tanganyika Project.

## 5.2.2 Burundi Component

According to the ProDoc, there was one project Outcome for the Burundi Component: *Wastewater management in Bujumbura strengthened through infrastructure completion, standards implementation, and community awareness raising*. This was in support of the overall project Objective (see above) and comprised one of two activities under Outcome 2 of the overall project. The PMU Terminal Report gives a different Outcome: *The wastewater management system in Bujumbura finalised, thereby reducing point source pollution levels of Lake Tanganyika waters and so improving biodiversity habitats*. The evaluator was advised by UNDP that this arose from a fully reviewed and updated Burundi Component produced by an international consultant hired by the PCU after the project implementation started. This document was validated by a wide range of Burundi stakeholders around the time the PM commenced his duties.

In its efforts to assess progress towards the Burundi Outcome, this evaluation sought answers to the following three questions –

- *Has infrastructure been completed?*
- *Are standards being implemented?*
- *Has community awareness been raised?*

The PIR2010 listed six Indicators for Outcome 2 of the overall project and as discussed above, these were not very useful. In fact, there is no need for Indicators to provide answers to the first and second questions – the infrastructure is either completed as planned or not; and, the standards are being implemented or not. In order to determine whether community awareness had been raised, one or two indicators would have been helpful but none are provided.

In an effort to determine whether the project has succeeded in strengthening wastewater management in Bujumbura and achieved the targeted Outcome, the evaluator examined the activities and Targets that were sought under the five Outputs, noted the progress as reported by the PMU and added his analysis and comments. This assessment is summarized in the table below.

**Table 20. Analysis of the activities and targets for the Burundi Outputs, and progress achieved**

BURUNDI OUTPUTS (as in PMU Terminal Report)	RESULTS AS FROM THE PMU TERMINAL REPORT	EVALUATOR'S COMMENTS
1 Tertiary wastewater collection network constructed and completed	The tertiary sewage system will be finally completed enabling the entire sewage system to function properly, if all planned connections are established. Works to achieve the secondary and tertiary networks for the town area of Buyenzi (the most populated in Bujumbura) are a priority. Wastewater collection in this low-lying area of Bujumbura mainly aims at preventing pollution of Lake Waters.  <i>Sub-outputs</i>	This activity has been fraught with problems and uncertainties. The ProDoc sought a tertiary system so as to reduce one particular point source of pollution into Lake Tanganyika.  At the time of writing and at the planned end of the project, <b>this Output has not been achieved</b> . While the Government must accept some of the blame for this as a result of their decision to opt for a secondary level reticulation, UNDP and UNOPS were aware



	<p>1.1– <i>Implementation studies carried out</i>                  1.2 – <i>The tendering procedure for selecting the construction contractors established</i>                  1.3 – <i>The construction contractors selected</i>                  1.4 – <i>Tertiary sewage infrastructure constructed</i></p>	<p>that this would not have satisfied the commitment to the GEF. It was therefore pleasing to note the reconsideration by the Government in favour of a tertiary level network to allow households to connect and it would have been a really positive gesture on the part of the Government if SETEMU could have provided the modest finances on a loan basis for households to connect.</p> <p>The situation is changing constantly and at the time of writing, 20% of the planned tertiary reticulation has been completed. This is a significant improvement on the situation that existed during the field visit by the TE and it provides an opportunity for up to 8.3% (520) of the Buyenzi households to benefit from the project and for some positive impact on lake water quality. However, these are only potential connections and even when the tertiary network becomes available, there is no guarantee that the lake pollution will be any less.</p>
<p>2 The water treatment lagoon station improved in terms of quantity of water received and pre-treatment facilities operational</p>	<p>Industrial pollution will begin to be treated as a result of the construction of pre-treatment facilities at all major industrial facilities under the 'polluter pays' principle. The water treatment lagoon station will also be improved in terms of quantity of water received, because for the moment, it receives 6500 m<sup>3</sup> a day instead of 40,000 m<sup>3</sup> a day for which it was designed, this for completing the tertiary network and connecting industries equipped with pre-treatment systems.</p> <p><i>Sub-outputs</i>                  2.1 – <i>All pumping stations connected to the REGIDESO electricity, public toilets, water and electricity separators connected to the network</i>                  2.2 – <i>Pre-treatment facilities at all major industrial facilities completed.</i>                  2.3 – <i>Quantity of wastewater received by the lagoon treatment system increased</i></p>	<p>This Output should not have been included within the list as it is a wholly co-financed activity through a parallel project and the activities described are not the work of the project.</p> <p>Having said that, it can be conceded that the project has been a major influence in the adoption of the "polluter pays principle" and in encouraging pre-treatment at source for industrial effluents so they can become acceptable into the municipal system at Butere.</p>
<p>3 Discharge standards established, approved and issued</p>	<p>In order to ensure that the investment made in pollution control and management infrastructure is functioning appropriately, a system of discharge standards for the sewage system will be developed and implemented. This will enable any extraordinary discharge levels to be identified and appropriate remedial steps to be developed.</p> <p><i>Sub-outputs</i>                  3.1 – <i>Discharge monitoring laboratory established, equipped and commissioned</i>                  3.2 – <i>Laboratory staff and management trained</i>                  3.3 – <i>Discharge standards developed with stakeholders, validated and implemented</i>                  3.4 – <i>Water quality monitoring programme designed</i>                  3.5- <i>Water quality monitoring programme commissioned</i></p>	<p>The discharge standards have been developed by the project, approved by the authorities and are being applied according to thre latest information supplied by the PMU and <b>this Output has been achieved.</b></p>
<p>4 Awareness of urban communities about the biodiversity and public health impacts of pollution raised and monitoring inputs developed</p>	<p>INECN has already created a special pollution control group to promote greater awareness among urban communities and industrial stakeholders about pollution issues. The team requires training in the field of communication, management of chemical and bacteriological analysis, sampling as well as interpretation methods.</p> <p><i>Sub-outputs</i>                  4.1 – <i>Strategy for raising urban community awareness developed</i>                  4.2 – <i>Strategy implemented</i></p>	<p>This is not an easy Output to assess and most projects make the mistake of focussing on what they have done to raise awareness but fail to go the next step and try and determine whether they have been successful. This project did dwell somewhat on the activities it carried out to increase awareness (such as workshops and other events), but in response to the evaluator, it also revealed that it has measured the following results as proof that <b>awareness has indeed increased:</b></p> <ul style="list-style-type: none"> <li>• Wastewater treated increased from 6500 m3/day(2010) up to date 11 000 m3/day</li> <li>• Pre-treatment undertaken by industries increased and ongoing (Brewery, slaughterhouse, Savoron (soaps industry), tannery industry (Afritan), textile industry (Cotebu)</li> <li>• Connection to the wastewater undertaken by Hotels increased (Roca Golf, Amahoro)</li> <li>• 1.5 householders connected today /month)</li> </ul> <p>It is also worth noting the "publications" listed by the PMU as produced by the project and the list of project events supplied by the PMU – both of these are in Annex 8, and</p>

		<p>both focus almost entirely on awareness raising targets. One possible contributor to the success in awareness raising was the involvement of senior political figures - Ministers and Vice President were part of awareness raising campaigns.</p>
<p>5 Project implementation study updated and project effectively managed, monitored and evaluated</p>	<p>The project implementation study initially developed in 1990 for the expansion of the sewage system in Bujumbura needs to be up-dated in line with the current situation and future sanitation needs of the city. The project will also need to develop an effective and efficient Management Information System (MIS) that will be a key administrative tool for the project's implementation. The MIS will require the timely acquisition, analysis and dissemination of relevant information to the project's staff and stakeholders. It will therefore be important that the Project Implementation Unit (PIU), in collaboration with key stakeholders, agrees and develops an effective and appropriate MIS.</p> <p><i>Sub-outputs</i></p> <p>5.1 – Project implementation study updated</p> <p>5.2 – Project staff recruited</p> <p>5.3 – Management Information System (MIS) developed and implemented</p> <p>5.4 – Preparation and implementation of Annual Work plans and Budgets (AWPB) carried out</p> <p>5.5 – Mid-term reports and end of project evaluation planned and conducted</p>	<p>This is basically project management and administration and as such it is not an Output – it is an activity through which all Outputs are managed and implemented. The Terminal Report, with its focus on the Management Information System, suggests that this could have been a separate Output, since it does not have any practical connection with staff being recruited, preparation of AWPBs, or MTE or TE.</p>
<p><b>Overall conclusions and rating on the Burundi Component:</b>                  Under the Burundi Component, the project sought completed infrastructure, standards adopted and implemented and raised community awareness – all this so as to achieve a decrease in point source pollution of the lake. In spite of the scope of work carried out, the Burundi Outcome has not been achieved and progress is considered to have been <b>Moderately Satisfactory (MS)</b>.</p>		

### 5.2.3 DR Congo Component

The immediate objective of the DR Congo Component was the same as that for the overall Project, namely, “*The protection and conservation of the biodiversity and the sustainable use of the natural resources of Lake Tanganyika*” and according to the PMU Terminal Report, two Outcomes were recognized, viz:

**Outcome 1:** Government and community natural resource management institutions strengthened with capacity to improve catchment status and reduce sediment load.

**Outcome 2:** The natural resource base in and around Uvira sustainably managed through improved land-use practices with reduced soil loss and sediment loads.

From the evaluation perspective, these two Outcomes are in effect two parts of the same Outcome and are treated as such in the assessment below which is based on the Outputs in the PMU Terminal Report and the evaluator's observations.

**Table 21. Analysis of the activities and targets for the DR Congo Outputs, and progress achieved**

DR CONGO OUTPUTS (as in PMU Terminal Report)	RESULTS AS FROM THE PMU TERMINAL REPORT	EVALUATOR'S COMMENTS
1 Government and community natural resource institutions reviewed and strengthened for integrated catchment management	<p>The following are the key highlights in terms of realization;</p> <ol style="list-style-type: none"> <li>1 35 Government Officers (over 95% in Uvira) have been trained on various catchment management interventions</li> <li>2 Over 32 community institutions (representing over a 1000) members were trained and supported on catchment management intervention strategies With respect to community institution, customary community structures supplemented by locally established community association provide avenues for community outreach</li> <li>3 Two coordinating community Institutions were established to ensure sustainability of the afforestation and agroforestry initiatives and Improved energy promotions</li> </ol>	<p>The Output sought stronger government and community institutions. The PMU described the steps taken towards this but there is no indication of whether the institutions are any stronger, and by how much. This is difficult if not impossible without a baseline to set the departure point. The evaluator therefore has to rely on personal observations and concludes that while there is evidence of strong community institutions, the same cannot be said of the government institutions.</p> <p>The Output has been partly achieved.</p>
2 The hydrology of priority high sediment load rivers investigated and river sediment reduction management plans developed	<p>The aim for this output is to ensure that the regime of high sediment-load rivers is well understood and erosion reduction management plans in place.</p> <p>During project Inception, a prioritization of high sediment load subcatchments was undertaken with involvement of all key stakeholders (WWF, Environment Service, Hydrobiology Research Centre (CRH), ICRAF, etc). The three sub-catchments which were prioritised include Mulongwe, Kalimabege and Kigongo.</p> <p>Through a participatory approach, an integrated sub-catchment management plan was developed and is in place, Annex 2, attached. The sub-catchment management plan provides an important and valuable documentation and guide for catchment management interventions in Uvira by all stakeholders even after project durations. It is envisaged that CHR will continue monitoring hydrologic regimes of the priority rivers on long-term after project closure, based on the management plans</p>	<p>The project sought the investigation of the hydrology of selected rivers and the development of management plans. The PMU reported how the rivers were selected and how a management plan was developed. It also expressed the view that monitoring will continue. Unfortunately, there is no indication of whether the hydrology was ever investigated and if so, what the results were. Had this been done, it would have been an excellent opportunity to set down a baseline against which to gauge improvements.</p> <p>The Output has been partly achieved.</p>
3 Appropriate agroforestry practices and soil management needs assessed with stakeholders in priority areas and populations	<p>Under this output, the project sought to promote appropriate agroforestry and soil management innovations which are effective in combating deforestation and controlling soil erosion while enhancing farm productivity. Two approaches were adopted and implemented;</p> <ol style="list-style-type: none"> <li>1 Promotion of agroforestry and appropriate farming innovations for soil erosion control</li> <li>2 Implementation of sediment control mechanism</li> </ol> <p>This approach has proved to be extremely very effective. The sensitization served to raise awareness and the very significant improvement in crop productivity has been the main motivation. In almost all farms that adopted the new innovation, based on contour farming, there cassava productivity doubled. In one demonstration site, Mulongwe sub-catchment, the farm owner realised over US\$ 1,000 from a half acre plot which only used to provide food for domestic use. In this particular demonstration site, 400 new farmers acquired training by from the initial beneficiaries and adopted the new innovation. 230 gabion boxes were installed to control erosion.</p>	<p>This Output has been fully achieved as evidenced by the grassroots community members consulted by the evaluator and the site visits on the ground, to the tree nurseries and shambas above Uvira.</p>
4 The capacity of government and communities to establish and successfully manage tree nurseries sustainably producing appropriate forestry	<p>Both indigenous and exotic species that are carefully selected to suit ecological and local preference were promoted. In total, 27 tree seedling nurseries were established for both agro-forestry and forest tree planting, against a target of 15 tree nurseries. A total of 1,855,355 tree seedlings were produced against a target of 1,200,000 tree seedlings (a realization of over 150%). In addition, farmers were trained on how to use cuttings of indigenous tree for tree regeneration and an additional 1,028,646 trees were planted as cuttings.</p> <p>Significant capacity has been developed in both community and Government institutions to raise seedlings to meet the enormous challenge for tree growing in the Uvira sub-catchment. All the 27 local association, at least three people were trained on nursery management skills. Among them, it was obligatory for each local association to enlist an agronomist</p>	<p>This Output has been achieved, certainly in terms of the communities, and although capacity-building among government personnel could not be ascertained in Uvira, the PMU report is accepted.</p>

and agroforestry species strengthened	were trained. This was to ensure best efficiency and effectiveness of the specialised trainings undertaken. During the last season, a consortium of local association was able to coordinate all tree planting activities.	
5 Old managed forest areas rehabilitated and new community and private woodlots established and sustainably managed regenerating appropriate forest cover	<p>Project efforts and main focus was to initiate and demonstrate rehabilitation strategies in effort to restore the highly degraded and steep terrain.</p> <p>Selected sites against grazing and bush fires to allow natural regeneration. This was adopted as the most appropriate approach. Sites for rehabilitation were selected jointly with local community and local leadership who were sensitised on both the approach and the benefits</p> <p>Following projects intervention, a total of 170ha have been rehabilitated out of the targeted 120ha (over 140% realization). Most important is that for the first time over several decades, the local community members have started witnessing reoccurrence of mushrooms in the sites that have been set aside for natural regeneration. Mushroom is a highly valued delicacy and a nutritionally highly valuable food supplement. This directly contributes to food security, incomes as a result of sales and most important as a motivation to protect the natural environment.</p> <p>In addition to the total rehabilitee sites, a total of 800 ha of newly planted sites are realised out of targeted 600 ha of new woodlot plantation in private farms</p>	<p>Under this Output, the project has been successful in reforestation of degraded land through tree planting and through the retirement of land from grazing and protection from fires thus allowing natural regeneration. From the PMU report, this is likely to be sustainable because there is an added value in the form of mushrooms for the local farmers.</p> <p>The Output has been achieved.</p>
6 Appropriate energy-saving technologies assessed with stakeholders, piloted and widely adopted by targeted resource user groups	<p>The project adopted a stepwise building block fully participatory approach which included the following steps;</p> <ol style="list-style-type: none"> <li>1 A survey was contacted in the city of Uvira to document existing energy saving technologies (including models of improved wood stoves), assess people's awareness as well as identify other stakeholders undertaking the same;</li> <li>2 The Project facilitated participatory testing and selection of the most efficient model of improved stoves. This was undertaken during a 4 days' workshop in which participants jointly adopted and branded the selected models as "Jiko Linda", Swahili name meaning "stove for protecting" the environment. Notably, all the participating five (5) local associations proudly identify with the "Jiko Linda" model as their own brand.</li> <li>3 The five (5) local associations which were trained and participated in selection of the most efficient model were facilitated to establish a consortium for joint production and promotion. The led to establishment of '<i>Synergie des Associations pour la Promotion des Foyers Ameliors</i> (SAFAU)';</li> <li>4 Production and hands on training ; the project facilitated further training of 30 members of 5 associations (SAFAU) through hands on work place training support.</li> <li>5 Promotion and marketing of improved wood stoves, 'JIKO Linda mazingira' (stoves for protecting environment).</li> </ol> <p>This component started late, in April 2012, and actual production only started in December 2012. By February 2013, over 3,500 improved energy saving stoves were produced with only 2500 supported by project (cost of materials, excluding labour provided by members of SAFAU). By end of January, about 2000 units of improved wood stoves were sold with about US\$10,000 as revenue most of which was ploughed back to acquire more materials for production</p>	<p>This Output is a small success story. It would have been very interesting for the PMU report to calculate the amount of timber that is being saved through the adoption of the energy efficient stoves, and how this equates to hectares of trees saved.</p> <p>The Output has been achieved.</p>
7 Awareness of communities raised about soil erosion, deforestation and agroforestry management issues in relation to local livelihoods and the conservation of Lake Tanganyika	<p>The project made extensive efforts to model its environmental awareness raising and education activities according to local needs including use of a wide variety of traditional as well as innovative communication approaches such as workshops, radio programs, songs, theatre productions, T-shirts and banners with slogans, festive events, printed media, and Facebook postings.</p> <p>Women were identified as key advocates and they were deliberately targeted with outreach activities. In addition, as a strategic approach, all campaigns were targeted and sought to increase stakeholder awareness of the negative effects such as bushfires, while offering alternative options such as innovation for increasing soil fertility.</p> <p>A deliberate effort to involve and use tradition customary authorities was very effective as they are well respected and are in a position to influence and even enforce. The development and implementation of awareness raising strategy and environmental education manual support sustainability</p>	<p>In consultations with grassroots community members, the evaluator obtained an insight into their acceptance of the environment protection philosophy. It was also possible to observe their satisfaction of an approach which was also enhancing their livelihoods. Those spoken to were certainly aware; hopefully this awareness will spread. "Publications" of the project and events organized by the Project, as advised by the PMU are listed in Annex 8 – the focus of these is on awareness raising, training and information..</p> <p>Even in the absence of specific assessments of awareness, it can be said that this Output has been achieved.</p>
8 Project lessons and developments	<p>A dedicated position of monitoring and spatial officer was responsible.</p> <p>An elaborate monitoring and system was established and a database system developed at early stages of the project. As</p>	<p>The PMU Report does not address the Output. What it describes is an impressive M&amp;E system, however, this</p>

disseminated for replication in priority areas	a strategy, a key pillar of the project communication and reporting was based on well validated results on the ground. This was contractually embedded in all contractual agreement with associations and any other service or implementing partner, clearly setting out milestones which formed basis for monitoring. While this was a new and very challenging for most of the local association at the onset, it eventually proved to be a very good tool for instilling discipline and responsibility by both the PMU and the associations as each party had time bound obligations that had to be met. This served to enhance both operational efficiency and responsibility. At least one major comprehensive monitoring and validation was undertaken every quarter (three months). This provided the basis for quarterly reporting	could not be ascertained by the evaluator. The project commissioned an assessment of Lessons Learnt and the resulting report <sup>57</sup> identified 12 lessons, however, it cannot be claimed that this constitutes a dissemination of lessons or replication.
<p><b>Overall conclusion and rating on the DR Congo Component:</b>                  The DR Congo Component sought stronger institutions, improved catchment status with reduction in soil loss and sediment loads, and improved land-use practices. By and large these have been achieved and the DR Congo Component is rated as <b>Satisfactory (S)</b>.</p>		

### 5.2.4 Tanzania Component

The evaluator did not receive the PMU Terminal Report for the Tanzania Component and this evaluation has relied on information in the PMU’s paper on *Implementation Status and Exit Strategy Assumptions*, and the Self-Assessment administered by the evaluator. The PMU paper created some confusion since it listed 10 “Outcomes” and a large number of “Outputs” and it is not known where these originated from, when they were adopted and who approved them<sup>58</sup>. The Self-Assessment was the subject of a long exchange between the evaluator, the PMU, the VPO and the UNDP CO – but it did not result in a clear picture for the evaluator. The assessment below is therefore somewhat different from that for the other components

The two Outcomes for the Tanzania Component are indeed discrete Outcomes relating to two different Outcomes from the original overall ProDoc. It was therefore decided to focus the evaluation at the Outcome level and rely on the PMU Self-Assessment as the main source of information. However, it was also possible to make contact with a previous PM and her responses are considered as an additional source of information.

**Outcome 1 :** Sedimentation into Lake Tanganyika from pilot villages is reduced through integrated catchment management, thereby improving lake habitats

Questions arising:

- Has sedimentation been reduced?
- Have lake habitats been improved?

**Outcome 2:** Wastewater management at Kigoma – Ujiji Township strengthened, reducing point pollution levels of Lake Tanganyika waters and so improving biodiversity habitats

Questions arising:

- Has there been a reduction in pollution from point sources?
- Have biodiversity habitats been improved?

<sup>57</sup> Marijnissen, Saskia AE (2013) Sustainable catchment management interventions in the Uvira territory, South Kivu Province, DRC : Lessons Learnt.

<sup>58</sup> The VPO explained that the “Outcomes” were in fact “Outputs”, but the evaluator is still confused by what appear to be two tiers of outputs.

**Table 22a. Analysis of the activities and targets for the Tanzania Outcome 1 and Outputs, and progress achieved**

TANZANIA OUTCOME 1: Sedimentation into Lake Tanganyika from pilot villages is reduced through integrated catchment management, thereby improving lake habitats		
TANZANIA QUESTIONS	RESULTS ACCORDING TO THE CURRENT PMU SELF-ASSESSMENT AND THE VIEWS OF THE PAST PM	EVALUATOR'S COMMENTS
1.1 What integrated catchment management has taken place?	<p>Conducted meetings on awareness creation to key stakeholders, facilitated tree nursery establishments, identify locally available constraints and opportunities from income generating activities, facilitated tree nursery planting in pilot villages, building to villagers on recommended livestock keeping practices, identify alternative income generating activities specific to pilot village, trainings to villagers on energy saving stoves and monitoring sediment flow and subsequent changes.</p> <p>Previous PM:</p> <p><b>1. Awareness raised and capacity strengthened in integrated catchment management</b></p> <p>A. Raising awareness of key stakeholders on integrated catchment management:</p> <ul style="list-style-type: none"> <li>(i) 8 NPSC members representing 4 Sector Ministries, NGO, CARITAS and private sector;</li> <li>(ii) 15 PMC members representing different sectors, other institutions including NGOs, religious organisations and the private sector</li> <li>(iii) 3 Regional Secretariats-RSs; 6 LGAs; over 5,000 individuals from 6 pilot villages representing the Village Council, Village Committees on Environment and Natural resources, Village Land Use Management, SACCOS members and leaders</li> <li>(iv) Awareness and communication strategy prepared</li> <li>(v) 800 copies of popular version of laws and policies on EMA 2004, Forest Management, Beekeeping and Wildlife and 1,200 calendars produced</li> <li>(vi) Production, updating and dissemination of the Video documentary for the state of Environment for Lake Tanganyika Basin</li> </ul> <p>B. Strengthening the capacities of institutions and human resources in integrated catchment management:</p> <ul style="list-style-type: none"> <li>(i) To improve data capture, storage, processing and communication xxxx IT equipment were procured for implementing partners at 2 RSs, BWO, 6 LGAs;</li> <li>(ii) 3 Scientists and 4 Technicians from BWOs trained, over 700 individuals trained in alternative income generating activities (IGAs) and SACCOS from the 6 pilot villages, over 150 trained in PFM at 6 LGAs and pilot villages; over 500 trained in rocket stoves making in the 6 pilot villages; over 350 trained in tree seedlings raising and nursery management.</li> <li>(iii) Baseline on socioeconomic profiling of the 6 pilot villages produced</li> </ul> <p><b>2. Sustainable land use practices and soil conservation measures adopted in pilot villages</b></p> <ul style="list-style-type: none"> <li>(i) Sustainable land management strategies for the 6 pilot villages have been prepared including land use plans, sector management plans and 35 by-laws</li> <li>(ii) implementation of the formulated by-laws has commenced especially in the protection of water sources and sector pans have been instrumental reducing land related conflicts</li> <li>(iii) About 6,500 ha of land has been identified and demarcated as part of sustainable land management</li> </ul>	<p>The Outcome sought integrated catchment management which has been described<sup>59</sup> as having the objective of improving and integrating the management of land, water and related biological resources in order to achieve the sustainable and balanced use of these resources. The interventions described by the current PMU and the previous PM amount to a broad approach on land use and an attempt to identify any positive impact this might have on sediment load in rivers – this is an integrated approach to a certain extent.</p> <p>More specifically, reference can be made to the Ilagala palm oil extraction facility where the project is helping move an obvious source of pollution from the Malagarasi River bank by about 50-80 metres. However, the evaluator is concerned that the proposed soak pit for effluent could have secondary impacts on groundwater and even contaminate the water being obtained from the bore (after inordinate delays) which is within 20 metres or so from the soak pit.</p> <p>Further reference is made to the impressive reforestation efforts made on army land that had been degraded, the reduction in fuel wood use through the introduction of commercial level (for large institutions) and domestic energy efficient cooking stoves, tree planting along buffer strip for example along degraded shoreline,<sup>60</sup> and the microfinance scheme through which alternative income activities are supported such as honey production.</p>

<sup>59</sup> See for example - [http://www.awa.asn.au/Catchment\\_Management.aspx](http://www.awa.asn.au/Catchment_Management.aspx) and [http://www.ncwe.org.au/pos\\_papers/icm.html](http://www.ncwe.org.au/pos_papers/icm.html)

<sup>60</sup> As witnessed by Dr Benaiah Benno who carried out an evaluation of the Tanzania Component.

	<p>process for PFM in-situ conservation and about 120,000 different trees and fruit seedlings planted to secondary schools, primary schools and income generating activity groups in the 6 pilot villages</p> <p><b>3. Heavily degraded areas rehabilitated</b> 125 acres of heavily degraded land from four sites (Buronge, Kanywankoko, Maliba hamlet in Nyange, Buhoro and Kongamasasi) have been put under rehabilitation through biological and mechanical methods. The project supported KUMC working together with 24KJ and demarcated 53 acres of forest at Buronge hills putting under in-situ conservation and furthermore modern bee keeping has been introduced at Buronge with 100 Modern Beehives, honey harvesting equipment and training extended</p> <p><b>4. Environmentally compatible livelihood strategies are introduced and adopted in pilot villages</b> (i) Over 350 groups of alternative income generating activities actively involved in either in modern beekeeping; poultry, piggery, ducks and fish farming; rocket stoves making. (ii) Over 350 IGAs trained and opened savings accounts in their respective SACCOSs so that they are able to access micro credits to finance their entrepreneurial projects (iii) Tshs 120,000,000/ has been provided as seed funds to SACCOSs in the 6 pilot villages to facilitate micro credits facilities to IGAs (iv) Deep borehole of 60m has been drilled at Ilagala Village with the capacity of 30m<sup>3</sup>/hour; water supply and sanitation system has been constructed to serve over 25 palm oil processors</p> <p><b>5. Deforestation in pilot areas reduced through adoption of bio -energy saving technologies</b> (i) Over 2000 rocket stoves have been manufactured and installed to 1,998 vulnerable households in the 6 pilot villages (ii) Rocket stoves use 3 pieces of firewood per day compared to traditional three stones that use up to 10 pieces per day. It is estimated that rocket stoves manufactured in the 6 pilot villages will conserve about 41 ha of forest per year by saving about 15,750m<sup>3</sup> of wood supposed to be cut for fuel wood consumption per year (iii) 26 heavy duty energy saving and accessories (up to 260 litres cooking pots) have been installed to 17 institutions with high demands of fuel wood including prisons, Army camps, Secondary Schools and Teachers' training colleges in the 6 LGAs; Installed sustainable energy stoves are of high efficiency institutions have reduced fuel consumption by 60% from originally 30 – 60m<sup>3</sup> of wood per month. This is a saving of 19.3 ha of forest per year</p> <p><b>6. Baseline and subsequent sediment flows into Lake Tanganyika from pilot areas monitored</b> (i) Implemented sediment monitoring in targeted monitoring stations; analysis from the collected samples rainy season in 2011 (November –March) recorded high sediment levels in Kalambo at Kapozwa (193.4 tonnes/day) and low at Msambara (0.64 tonnes/ day). Other stations were Kongamasasi (0.52 tonnes/day) and Ruchugi at road bridge (1.809 tonnes/day) Water quality analysis indicated high total suspend solids Ruchugi River (TSS =432mg/l ) and less at Kapozwa – Kalambo – (TSS = 1.91 mg/l)</p>	
<p>1.2 Has sediment input to Lake Tanganyika from pilot villages (which ones?) been reduced?</p>	<p>Yes, through the integrated catchment management, sediment inputs from the pilot villages have been reduced. This was possible through improvement of the cover and reduction of shifting cultivation</p> <p>Previous PM: Erosion is an agent of sedimentation into Lake Tanganyika as exemplified by high rates of deforestation and deep gullies and the project was to address this environmental threat facing the Lake.</p> <p>Actual implementation of integrated catchment management activities especially tree planting and in-situ conservation that directly combat erosion commenced in Dec 2010; in 27 months one cannot confidently confirm that sediment input into the Lake from pilot villages has been reduced although it is evident that</p>	<p>The “monitoring” as described above seems to refer to one-off sampling of sediment rather than a logical comparison between the earlier situation and that arising following the changed land use activities. And, as the Previous PM notes in answer to this question, the timescale is far too short to discern any meaningful trend in sediment load. In other words, the wording of the Outcome from which the question arose, was unrealistic.</p>

	<p>there is reduction of sediment from Kapozwa going into the Lake through R. Kalambo.</p> <p>Many reasons come into play, one needs to wait for at least 3.5 to 5 years to observe reduction in sediment input. The selection of villages vis a vis sub-catchment (hydrological units) as areas of interventions may not bring best results, as some of the villages selected were mid-stream (Titye in Kasulu) the real erosion problem originates from up-stream villages of the Ruchugi sub-catchment (Shunga and Buhoro)</p>	
1.3 Has this been as a result of the project?	<p>The good results was due to project interventions as the condition was improved through different management approaches</p> <p>Previous PM: The project has contributed greatly to the achievement of the reduction of sediment input from Kapozwa but other players have also been actively involved water source protection</p>	Both the current PMU and the Previous PM are correct in saying that any changes in sediment load (if any are detectable) could be attributed to the project. However, even this assertion must be made with caution in view of the short timescale, as the changes could be one-off results of meteorological events and conditions.
1.4 Have lake habitats been improved as a result?	<p>Pilot areas were implementation of project activities undertaken has realized some improvement especially on the size of fish catch, river with clean water flowing into the lake. However, more time is needed before the we conclude the impacts of the project to lakes habitats</p> <p>Previous PM: Although no studies have been done to update status on lake's habitats but I am confident that there is significant improvement within Kibirizi spawning area as a result of the interventions at Buronge hills. I guess if studies are carried out results will confirm improvement in lake's habitat</p>	Once again the current PMU and the Previous PM are correct in being cautiously optimistic that lake habitats have improved, however, the claim of larger fish as a result is a little far fetched.
<p><b>Rating for Tanzania Outcome 1:</b> The catchment works carried out by the project do represent a satisfactory approach to integrated catchment management. But the "monitoring" carried out (and the short timescale) was not adequate to establish whether this had any impact on the sediment load carried by the rivers. If results, can indeed be seen, it is safe to assume that they are the result of the project, however, it is far too early to determine with any certainty that this has had a positive effect on lake habitats as targeted by the Outcome. The achievement of Tanzania Outcome 1 is rated as <b>Moderately Satisfactory (MS)</b>.</p>		

**Table 22b. Analysis of the activities and targets for the Tanzania Outcome 2 and Outputs, and progress achieved**

TANZANIA OUTCOME 2: Wastewater management at Kigoma – Ujiji Township strengthened, reducing point pollution levels of Lake Tanganyika waters and so improving biodiversity habitats		
TANZANIA QUESTIONS	RESULTS ACCORDING TO THE CURRENT PMU SELF-ASSESSMENT AND THE VIEWS OF THE PAST PM	EVALUATOR'S COMMENTS
2.1 Has wastewater management been strengthened at Kigoma-Ujiji? How?	<p>Yes, wastewater management has been strengthened in Kigoma Ujiji. Awareness on solid and wastewater was raised to more than 90% HH. Additionally the project supported Kigoma Ujiji Municipality on solid waste management, and preparation of solid and liquid waste management strategy which has resulted into the reduction of Lakes pollution especially through storm water. Either, wastewater system design for Kigoma-Ujiji Municipality that was to be updated expected to be implemented through the NDF under NCU</p> <p>Previous PM: With regard to this outcome, the project was to update the wastewater system for Kigoma-Ujiji Municipality among others. The system was not updated as it was non-existent and budget allocated was not sufficient to design a new system.</p> <p>However as a result of awareness raising and capacity strengthening KUMC and KUWASA is receiving support to design and construct the wastewater management system from the World Bank funded sustainable cities</p>	<p>The Outcome sought stronger wastewater management so as to reduce pollution and this seems to rely on the improvements of the wastewater treatment plant which were meant to be implemented under the PRODAP but which did not take place. The total reliance of the project on the successful implementation of another project (what the ProDoc described as 'intimately integrated'), without a risk management strategy, is considered a design flaw. In the circumstances, the project went ahead with training and capacity building (see for example Annex 8 for list of events) which unfortunately may never be applied. It also shifted its focus on solid waste management. However, in spite of these efforts and although it is not due to any</p>



	<p>project currently under implementation</p> <p>Participatory sanitation strategy for KUMC was prepared and adopted by over 700 residents, the strategy is under implementation and has changed sanitation of Kigoma-Ujiji</p>	<p>shortcomings on the part of the project, this Outcome can only be partly achieved at best.</p>
2.2 Has this led to a reduction in point pollution levels?	<p>Compared to the situation before, point pollutions reduced from the controlling the sources eg hotels, household and storm water</p>	<p>Since the intervention has not taken place, it is not clear how there has been a reduction in point sources of pollution.</p>
2.3 What pollution elements have been reduced?	<p>Sewerages discharge, agricultural fertilizers and fuels</p> <p>Previous PM: Pollution resulting from solid waste mostly plastic and other garbage that find themselves in the Lake through runoff has been greatly reduced</p>	<p>The elements sought need to be identified a little better than this. It is interesting to note the comment by the previous PM that solid waste input has been reduced and this is a welcome result of the project. However, it is not known when the change to solid waste was made and who approved it.</p>
2.4 Was this as a result of the project?	<p>Was the result of the project as most of the HH and institutions were not aware and had no concrete strategies before</p> <p>Previous PM: Yes this is 100% as a result of project interventions</p>	<p>Whatever reduction there has been could be ascribed to the project, but there has not been much.</p>
2.5 Have biodiversity habitats been improved as a result?	<p>Habitats has been improves as comparatively clean water is flowing into the lake, sewerage disposal is conveniently disposed. However more follow ups and law enforcement could give more good results.</p> <p>Previous PM: Other activities needed to have been implemented in tandem with wastewater management initiatives including mapping and closing of some of the biodiversity hotspots from over fishing regionally then one could confidently attest to the improvement of lake's biodiversity habitats</p>	<p>The evaluator feels that it is far too early to know whether there has been an improvement in biodiversity habitats.</p>
<p><b>Rating for Tanzania Outcome 2:</b> The basis for this Outcome was the construction of wastewater treatment facilities through a co-financed activity outside the influence of the UNDP/GEF project – unfortunately, this activity did not eventuate. Therefore, while the project may have strengthened wastewater management in Kigoma at the institutional capacity level, the ultimate outcome/result of reducing point sources of pollution and improving biodiversity habitats, strictly speaking, cannot be expected to be achieved and the rating is <b>Moderately Unsatisfactory (MU)</b>.</p>		

**Overall conclusions and rating for the Tanzania Component:**

The Tanzania Component sought two separate outcomes – reduced sediment inflow and stronger wastewater management. The former can be claimed to have been successfully accomplished, the latter less so. The overall rating for the Tanzania Outcomes is **Moderately Satisfactory (MS)**.

### 5.2.5 Zambia Component<sup>61</sup>

According to the revised LogFrame for the Zambia Component, there was one project Outcome: *Stakeholders in the Lake's catchment manage and sustainably utilize agricultural and forest resources to reduce sedimentation and conserve biodiversity*. It raised the following three questions –

**Q.1 Are land resources being managed and utilized sustainably?**

<sup>61</sup> The Zambia Component was the first to be evaluated as it was the first to reach closure. The approach adopted was slightly different to that applied to the other components.

Sustainability is not easy to observe or measure during the lifetime of a project and the LogFrame focuses instead on land use practices and techniques that are known to lead to sustainability. It provides only one useful Indicator, whereas the other so-called Indicators are mere Targets. However, in spite of the unhelpful indicators, progress is known to have taken place towards the management and utilization of land resources in a sustainable manner. This has been verified by the evaluator through the detailed accounts given in the project Quarterly Reports and the PIRs, as well as through visits to Mbete and Mwanangwa villages and discussions with beneficiaries.

**Q.2 Has sedimentation been reduced?**

There are no indicators provided for this element and neither are there any Targets ascribed to the Outcome. This is surprising since sediment loads are easily measured directly, albeit over a period longer than that available to the project. From the “Indicators” provided in the LogFrame it is not possible to determine whether sedimentation has been reduced. Quarterly Reports refer to sediment sampling but it is left to the PIRs to provide quantitative figures. Consultations revealed that suspended sediment reduction has been measured in the Izi, Lufubu, and Lunzua Rivers but not in the Munjela.

**Q.3 Has biodiversity been conserved?**

The LogFrame is completely silent on biodiversity. There are no Baselines, no Indicators and no Targets with a focus on biodiversity; neither are there any Outputs or Activities that focus specifically on biodiversity. This is most unfortunate because if there is no conservation of biodiversity, the Outcome cannot be claimed to have been fully achieved<sup>62</sup>.

In an effort to determine whether the project has succeeded in achieving the Outcome, the evaluator examined the Outputs, assessed the Indicators that had been selected, noted the progress as reported by the PMU and added analysis and comments. This is summarized in the table below.

**Table 23. Analysis of the Outputs for the Zambia Component and progress achieved**

OUTPUTS FROM REVISED LOGFRAME	RESULTS AS REPORTED BY THE PMU	EVALUATOR'S COMMENTS
<p><b>Output 1: Sustainable natural resources management practices (established)</b></p>	<ul style="list-style-type: none"> <li>Natural resources management plans and by-laws have been developed by communities in the project sites. By-law enforcement has had immediate impact in the sites as it has tremendously reduced cases of illegal harvesting of natural resources especially forests. This can be seen in part through some cases handled by the communities ( 26 cases reported most of them on illegal charcoal production and a few on illegal timber harvesting by trained community forest rangers.</li> <li>Agriculture demonstration sites where low input agriculture is show cased benefiting 13,400 Farmers (5360 women and 8040 males). The communities who have implemented lessons from demonstration plots have reported cases of increased yield especially in the cases of</li> </ul>	<p>The Output is looking for <b>established sustainable management practices</b>, and the project has delivered:</p> <ul style="list-style-type: none"> <li>*Management plans &amp; by-laws developed by communities</li> <li>*Increased yield, especially maize and cassava</li> <li>*Tree nurseries in 10 schools</li> <li>*Demonstration plots for fruit growing</li> <li>*Protection of 200 hectares of natural forests</li> <li>*50 hectares in commercial woodlots</li> <li>*Water quality monitoring system</li> </ul>

<sup>62</sup> UNDP presented a different perspective in which it argued that “it is expecting too much for the indicators at output (lower outcomes or effects in this case) to be cross referenced against sedimentation levels and biodiversity. These are meant to capture the outcomes that lead to achievement of the goal (sedimentation and biodiversity). The listed indicators should be cross-referenced with the outputs and their immediate effects”. The evaluator is of a different opinion.

	<p>Maize and Cassava</p> <ul style="list-style-type: none"> <li>• Establishment of tree nurseries in 10 schools</li> <li>• Development of a tree selection manual that will enable the stakeholders to continue to implement agro-forestry interventions meant to improve catchment management and mitigate against sedimentation. This has been done with the help of the World Agro-Forestry Centre (ICRAF).</li> <li>• Development of a manual for identification and management of Invasive species that have been identified to be a major threat to biodiversity in the updated Lake Tanganyika regional Strategic Action Programme. The manual provides an opportunity for stakeholders to continue to identify and manage invasive species beyond the life of the project.</li> <li>• Demonstration plots for fruits( 11 plots for bananas and 3 plots for Oranges) were set up. The community continue to learn from these plots as well as implementing the lessons in their fields.</li> <li>• Community sensitizations on enforcement of natural resources by-laws resulting in a number of arrests. Chipote Community confiscated 286 pieces of illegal timber while Kabyolwe confiscated 27 and the VCDCs are working hand in hand with the DFO.</li> <li>• Protection of 200 hectares of natural forests; Trees planted in 50 hectares in Commercial woodlots and 100 hectares on individual farmer plots.</li> <li>• Water quality monitoring system has been set up and will be continued by the Department of Water Affairs beyond the life of the project.</li> <li>• Mainstreamed HIV/AIDs, Gender and Climate change in all the trainings as cross-cutting issues during the woodlot nursery establishment training held in 2011</li> </ul>	<p>*Mainstreaming of HIV/AIDs, Gender and Climate Change</p> <p>Of these, the protection of natural forest, the tree nurseries in schools and the community management plans and bye-laws are probably the most effective progress towards sustainable management practices. Commercial woodlots and fruit growing demonstration plots are also considered effective; while increased yields of cassava and maize will help convince community members that the project is working. Water quality monitoring is a useful measure of effectiveness of the management practices. The mainstreaming of HIV/AIDs, Gender and Climate considerations is something that should have happened right across the board since these are UNDP corporate commitments.</p>
<p><b>Output 2: Alternative income generating activities (AIGs) (developed)</b></p>	<ul style="list-style-type: none"> <li>• The revolving fund has been established and the resulting micro-financing has helped the emergency of entrepreneurs in the project area. Applications are processed by Village conservation development committee (VCDC) level to DDCC level for desk and field appraisal. In terms of number of beneficiaries 847 people have benefited, 471 of which are males and 366 are females from the disbursed 308,000 USD.</li> <li>• The project has adopted the policy of helping vulnerable but viable farmers and it trains the beneficiaries in business skills and many other relevant skills.</li> <li>• As of 31st December 2011, the fund has grown from 308,000USD (1.54 Billion ZMK) originally provided by GEF and UNDP Country office from December 2009 to 323,000 USD(1.615 Billion ZMK)</li> <li>• 24 individuals closely monitored by the project have grown their income from an average of 157USD dollars per year to 5000 USD by investing in vegetable growing; bee-keeping; fish farming and growing seasonal crops</li> </ul>	<p>The Output sought the <b>establishment of alternative income generation activities</b> and the project has delivered:</p> <p>*The revolving fund has been established *Capital of the fund has increased          *Vegetable growing; bee-keeping; fish farming and growing seasonal crops          *24 individuals' income up from \$157 to \$5000 per year on average</p> <p>The most relevant of these results is the <i>bee keeping, vegetable growing, fish farming and seasonal crops</i> because these are AIGs. On the other hand, the establishment of the Revolving Fund and its capital growth is also an important project result because virtually all community members need financial resources to establish AIGs. And, the significant increase in average income, is proof that what the project is proposing makes economic as well as ecological sense.</p> <p>The evaluator has verified these and other achievements towards this Output from various reporting documents and from site visits to participating villages.</p> <p>One slight concern of the evaluator is the extent of training provided in business planning for participants in AIGs – he was reassured that this has indeed taken place. Another concern is the existence and capacity of the market for the AIG products. Whenever this matter was raised, the evaluator was assured that the markets exist, however, there is no obvious evidence of any market research having been carried out and attention to markets should be one of the activities in the exit strategy.</p>
<p><b>Output 3: Awareness of stakeholders on the importance of sustainable natural</b></p>	<ul style="list-style-type: none"> <li>• Awareness meetings on the importance of sustainable natural resources management and sedimentation specifically have been held for communities in all the 11 VCDCs. This has resulted in increased awareness in the project area.</li> <li>• Awareness meetings on tree nursery establishment and management have been held</li> </ul>	<p>The Outputs sought <b>raised awareness</b> and the project delivered a series of activities and documents which were targeted towards raising awareness (see Annex 8). However, meetings, training and capacity building are not results – certainly not the results that the Outputs was looking for.</p>

<p><b>resource management, raised</b></p>	<p>at 10 of the 10 schools in the project area</p> <ul style="list-style-type: none"> <li>• Awareness meetings for leaders (Chiefs, Councillors and Headmen). Consequently, the leaders are very supportive to the project and the work of the VCDCs</li> <li>• Capacity of Village Conservation Development Committees, headmen, and chiefs has been enhanced. The results of this are that VCDCs are capable of holding meetings and keeping minutes.</li> <li>• Areas for natural resources regeneration have been identified and demarcated in Mpulungu and Chambanenge local forests. The area where firebreaks have been within the two local forests is estimated at 200 hectares.</li> </ul>	<p>There was a need for Indicators of raised awareness, probably documented through a proper survey of stakeholders.</p> <p>However, and in spite of the unhelpful Indicators, the evaluator was able to ascertain that awareness had indeed been raised at the community level in the two villages he visited.</p>
<p><b>Output 4: Capacity of local governance structures for sustainable natural resource management, enhanced</b></p>	<ul style="list-style-type: none"> <li>• 11 VCDC have been established and capacity enhanced</li> <li>• All 11 VCDC have enacted by-laws and are enforcing them</li> </ul>	<p>The Output is looking for <b>enhanced capacity</b> and the results reported by the PIU comprise - 11 VCDCs established, their capacity enhanced and all have enacted bye-laws and are enforcing them. While the setting up of the VCDCs does not indicate capacity, the enactment of bye-laws and their enforcement, does. Unfortunately there is no measure of the degree of capacity but there are a number of good signs that it exists. Among these, the evaluator noted the significant buy-in at local governance and political levels.</p>
<p><b>Overall conclusions and rating for the Zambia Component and the Zambia Outcome:</b>                  The Zambia Component sought to reduce sedimentation and conserve biodiversity. From the information available, the first target of reduced sediment in rivers has been met or will be met. The conservation of biodiversity is not so easy to determine. Overall progress towards the Zambia Outcome is considered to have been <b>Satisfactory (S)</b>.</p>		

Since the TE for the Zambia Component in August 2012, a Management Response was made to the three recommendations and action has been taken as follows –

**Table 24. Action taken in Zambia following the TE of the Zambia Component**

RECOMMENDATION	ACTION TAKEN (as advised by UNDP to the evaluator)
<p>UNDP should obtain the concurrence of the GEF for an extension to the project, at no additional cost to the GEF, to enable the orderly handing over of the Revolving Fund to the ZNFU. The handing over process should enshrine an agreement that the fund will only be used to further the objectives of the project namely, the reduction of sediment load in the rivers flowing into the Lake</p>	<p>Extension of the project : The project has been extended up to June 2013 initially and further with additional resources of \$ 620,000 to undertake the following activities :</p> <ul style="list-style-type: none"> <li>• Consolidate the training of the small scale farmers on adoption of sustainable agriculture techniques, management of the village woodlots and promoting alternative sustainable livelihoods</li> <li>• For smooth transition of the management of the revolving funds from the project to Zambia Farmers Union</li> <li>• Construction of the processing centre which was a felt need for assurance of market to sustain the increased production of crops that has taken place due to the adoption of sustainable agriculture practices by small scale farmers.</li> </ul> <p>These activities may not be completed by 30 June and UNDP is ready to support the development and implementation of a small project to continue the activities</p>
<p>The Department of Water Affairs and the Ministry of Agriculture and Livestock should collaborate to formulate a joint proposal for a project which will research and monitor the comparative effectiveness of various land use practices to reduce sedimentation. The investigations should also cover the effectiveness of riparian buffer strips, planted</p>	<p>Further research on</p> <ul style="list-style-type: none"> <li>• Effectiveness of the adopted sustainable agriculture techniques for environmental protection: Discussions with the Zambia Farmers Union have been held to incorporate research activities on effectiveness of the techniques for environmental protection. In principle this has been agreed and the Zambia Farmers Union considers to be a critical element in ensuring environmental sustainability. The next step is to identify a research institution that will collaborate with the Zambia Farmers Union. It is envisaged that the cost of the research could be absorbed from part of the administration cost.</li> <li>• Monitoring the water quality: discussions with the Water Affairs Department have been held; they have agreed to continue with this activity and they will budget for it in the next year's budget. Further the Water Affairs Department is one of the beneficiary institution for the \$230m water and sanitation</li> </ul>

<p>and allowed to mature naturally. UNDP could advise on an appropriate source of funding support</p>	<p>programme commencing next year supported by the USA- Millennium Challenge Corporation (MCC). The Department will benefit from water quality monitoring equipment and staff training.</p> <ul style="list-style-type: none"> <li>• Efficiency of the planted trees for environmental protection: Government has developed and implemented a national tree planting covering all districts. The first phase has been raising seedlings. The 2<sup>nd</sup> phase is planting trees country wide including research for tree species adaptability in various ecosystems and their performance in terms of sustainability. The Government annual budget for the programme is about \$5m</li> </ul>
<p>UNDP should assist the government to search for a solution to the charcoal conundrum involving an alternative source of energy, preferably a renewable one. This could be the subject of a GEF project</p>	<p>Promoting sustainable alternative energy sources: charcoal production has been identified as one drivers of deforestation (Zambia UNREDD report Drivers of Deforestation,2012). To address this the Ministry of Energy have requested support from UNDP and Chinese Government to promote renewable energy across the country; the concept note is attached for your information and also to provide some direction as discussed</p>

The above records a very satisfactory outcome from the TE of the Zambia Component.

### 5.3 Mainstreaming of UNDP corporate goals

“Mainstreaming” is not something that you achieve; it is a process through which something that would otherwise be marginal is brought into the core business and main decision-making process of an organization. UNDP has adopted a number of corporate goals, mostly reflecting the Millennium Declaration, and there is a commitment that these should become mainstreamed into all its functions and interventions. The most relevant for a project such as this are gender equality, alleviation of poverty and safeguarding human rights and there is a commitment that these become an integral dimension of the design, implementation, monitoring and evaluation of policies, programmes and projects of the organization. It is therefore incumbent on an evaluator of a UNDP project to assess the extent to which the project took on board these UNDP goals.

The project does not have an overt **gender** perspective. Neither the main ProDoc nor the Tanzania Component mentions gender at all. The Zambia Component ProDoc does consider gender and states that *“there were no gender-disaggregated data at the time of project design, ... budgetary provision has been made to do more work in this area and allow for gender awareness campaigns to ensure mainstreaming of gender variables at early stages of project implementation.”* However, the extent to which this was carried out is unknown.<sup>63</sup> On the other hand, the PIR2011 does note that *“37% of Village Conservation Development Committees are female. The project has funded 837 farmers through the revolving fund, out of which 366 (43.7%) are women. Average annual income of women funded through the alternative income generating activities revolving fund has increased from USD 157 in 2008/2009 farming season to USD 3,125 (!) in 2009/2010 farming season.”* A similar situation is described in PIR2012 for DR Congo. However, it is not clear that there was any effort to consider the different implications of the project for women and men; no disaggregated data on a gender basis; no strategy to address the different needs of women and men. The evaluator did not come across any female members of any PMU<sup>64</sup>; no effort was evident to address gender differences in any planned action. This would have been highly relevant to the catchment activities under Outcome 3 since most of the work in the shambas is carried out by women and most of the firewood gathering is done by women – increases in productivity were of benefit to women, efforts to reduce cutting trees for firewood present women with an enigma on how to cook the household meals.

The project did recognize the level of **poverty** among its grassroots stakeholders and beneficiaries. The main ProDoc dwells on poverty as part of the context for the project and makes numerous references to PRSPs. The Zambia ProDoc noted the poverty/environment nexus and similar discussions are carried in the Tanzania ProDoc, but to a lesser extent. The Project also brought in AIG activities to reduce pressures on the ecosystem. These activities targeted the poor farmers because they were having an impact on lake water quality, but in doing so, they also had a very positive socioeconomic benefit leading to the improvement of livelihoods. The project can be said to have mainstreamed poverty alleviation into its operations and implementation.

**Human rights** are not mentioned at all in the main ProDoc, the Tanzania ProDoc or the Zambia ProDoc. In a region fraught with well-documented human rights abuses, where the UN is assisting with post-conflict recovery, the lack of attention to human rights is a patent shortcoming. As UNDP says<sup>65</sup> *“UNDP supports 'human rights for development' in more than 100 countries and connects partners in a global network. This work is about expanding choices and protecting rights and freedoms.”* This omission is ironic since the project is implicitly empowering people, expanding their choices, improving their quality of life (which are human rights). The project cannot be seen as having mainstreamed human rights in its operations and implementation.

<sup>63</sup> The only reference to gender in the PM's Terminal Report is under the assessment of progress under Output 1, which states *“Mainstreamed HIV/AIDs, Gender and Climate change in all the trainings as cross-cutting issues during the woodlot nursery establishment training held in 2011”*.

<sup>64</sup> It is acknowledged that the CTA in the PCU for three years was a female and the PM for the Tanzania Component was a female for about a year and a half. Both had left the project by the time of the evaluation.

<sup>65</sup> [http://www.undp.org/content/undp/en/home/ourwork/democraticgovernance/focus\\_areas/focus\\_human\\_rights/](http://www.undp.org/content/undp/en/home/ourwork/democraticgovernance/focus_areas/focus_human_rights/)

## **5.4 Impacts**

The achievements of Outputs which lead to Outcomes are assessed by LogFrame analysis which is mainly carried out by the Project M&E System, and confirmed by the TE with reliance on good Indicators. The conversion of Outcomes to Impacts often requires an Intermediate stage and this is assessed mainly by TE methodology. It is predicated by Assumptions, and is dependent on Impact Drivers which include Relevance, Sustainability and Catalytic effects.

### **5.4.1 Impacts at the national level**

The project achieved the majority of its Outputs and Outcomes with the exception of Outcome 2 – reduction of point sources of pollution. The results achieved by the project have led to Intermediate Impacts as planned – namely, capacity, awareness, demonstrations, governance frameworks, tools and methods, and national impacts have already taken place, albeit on a restricted local scale. The next step to achieve truly national level impacts is dependent on the extent of replication and upscaling of the project benefits, products and services. This will depend on a number of external assumptions being realized.

In Zambia, DR Congo and Tanzania, the project has promoted a new approach to the use of land for agricultural purposes; it has also built a strong case for the protection of forests and other vegetative cover; and, in doing so, it has brought significant improvements in income that farmers earn from their work on the land and this has been translated into an improvement in their quality of life. The project has also raised awareness of the benefits that can arise through wise land use such as sustainable forest management, and conservation agriculture; it has also enhanced the capacity of local officials dealing with the primary production sector as well as those in local government. Even in wastewater management, where it has not been entirely successful, the project has raised awareness and sensitivity to the values and vulnerabilities of the lake and this is a valuable impact at community level.

### **5.4.2 Regional impacts**

Lake Tanganyika is a regional resource shared by the four riparian countries. The benefits of Lake Tanganyika are shared, but so are the problems. It is therefore imperative that the entire catchment is managed in an integrated manner; and for this to happen, there must be an effective, cooperative framework on a regional basis.

This project has been instrumental in the setting up and strengthening of the Lake Tanganyika Authority (LTA) and its various organs; in setting the foundation for joint management of the Lake's resources; in designing a regional monitoring system leading to a regional information management system. It has set the scene for cooperation and mutual sharing of know-how and expertise, problem-solving, benefits, responsibilities. Among the products that the project has produced or improved are the LTA itself, the Convention and its protocols, the SAP and the NAPs. It has provided momentum to the political commitment of the four governments to cooperate on the management of Lake Tanganyika and its resources for the common good of the inhabitants of the lake catchment – this has probably been one of the most significant impacts of the project, and the one which has the highest likelihood of sustainability.

### **5.4.3 Global environmental impacts**

The project addressed the GEF Operational Programme #9: Integrated Land and Water Multiple Focal Area Programme, with a focus on the wise use and management of land and water resources

and sound management strategies as a result of changes in sectoral policies and activities that promote sustainable development. All four governments have been party to the Transboundary Diagnostic Analysis (TDA) that has been carried out with GEF support on the Lake Tanganyika environment and the formulation and adoption of the Strategic Action Programme (SAP). This project has addressed priority threats to the lake environment, namely, the uncoordinated approach and weak institutional basis for the management of Lake Tanganyika biodiversity and resources, the sediment reaching the lake through rivers draining lands which are not being used in a sustainable manner, and the point sources of pollution through untreated wastewater.

The project set up the Lake Tanganyika Authority and enhanced the Convention and its protocols, improved land use in the lake catchments so as to reduce erosion and the sediment load carried by the rivers and attempted to address the problem of untreated wastewater discharges. These targets fit well within the outcomes expected by OP#9 which include the long-term commitment on the part of governments, IAs, donors, and the GEF to leverage the intended sectoral changes to address the root causes of complex environmental problems.

The transboundary nature of Lake Tanganyika and the threats it is facing give it a global dimension and any benefits accruing to the lake are global benefits.

## 5.5 Sustainability

The ProDoc makes numerous references to sustainability, mostly in the form of claims that particular actions and activities of the project will enhance sustainability. There are fewer references to replication and these are made as if replication is not something the project has to take an active interest in.

The project has piloted and demonstrated successfully various techniques for land use which should control runoff and erosion and therefore reduce the sediment load in rivers draining into the Lake. It has also piloted and demonstrated approaches to reducing pollution from point sources. However, pilots and demonstrations are not results – results are obtained through the upscaling and replication of the pilots, and this is why sustainability of the project products, services and benefits beyond the life of the project, is so crucial – this line of thought was not explored by the ProDoc. It is interesting to note that the evaluator was advised by WWF-DR Congo that having tested the new approaches at the pilot level, WWF will adopt them for work they are doing in other catchments in the DR Congo, such as in the valleys leading to the Congo River.

In spite of this omission in project design, the project has laid a strong foundation for replication and upscaling, and some “heirs” have been identified. The following discussions explore the extent to which this has been developed in the individual Exit Strategies or Sustainability Plans and the risks that might influence the likelihood of sustainability.

### 5.5.1 The exit strategies / sustainability plans

At the **Regional** level, exit strategy considerations are incorporated into the Project Terminal Report by the PCU which discusses the various “tools” that the project has put in place to enhance sustainability such as increased capacity, guidelines and manuals, assets such as vehicles and targeted workshops to identify institutions that will inherit the project’s products and services. It then provides a comprehensive table listing each substantive outputs obtained by the project, the exit actions that must be taken before the project ends, the institution that will inherit the output, the possible sources of funding support for future work and the monitoring regime that will need to be put in place post-project. This is a very thorough approach to sustainability and the only improvements that can be suggested would be a better focus on replication (such as the identification of new localities or criteria for their selection and prioritization) and written



acknowledgements from successor organizations confirming their commitment to continue with the good work of the project.

The **Burundi Component** exit strategy comprises a table which is similar to that produced by the PCU with a focus on the specific outputs addressed by the component. The focus of the table is on what needs to be done, mainly by others rather than what the project will do. For example, for its flagship output – the sewer reticulation in Buyenzi, it dwells on the need to extend the reticulation and connect more households but says nothing about maintenance responsibilities, sources of funding support and financial sustainability, SETEMU capacity and institutional sustainability and local government plans for Buyenzi and political sustainability. It provides no plans or any other details on where the reticulation should be taken to and why.

The **DR Congo Component** produced a comprehensive exit strategy as an annex to its PMU Terminal Report. It described the various measures taken and outputs targeted so as to enhance sustainability. These included capacity, know-how and training, empowering community organizations, sensitization of key resource user groups, and promoting a collective approach to marketing as a means of financial sustainability. It made reference to a stakeholders meeting in February 2013 where agreement was reached on institutional roles and responsibilities to ensure sustainability of the project benefits. However, the table that followed simply reiterated what the project has done throughout its two years of implementation and provided no replication plans, no identification of new localities to expand to, and no formal commitments from the named organizations. It can be noted here that senior government officials in Kinshasa stated that “*sustainability is our responsibility*”.

The **Tanzania Component** PMU produced a very comprehensive document in table format entitled “*Implementation status and exit strategy assumptions*.” While the table provided some pertinent proposals such as “*Harmonize the activity with normal departmental activities*”, it mainly reported what is on-going and what others should do – this did not constitute a strategy or plan on the part of the project. The inclusion of a column with “*Risks and Assumptions*” was an excellent idea, but apart from being incomplete, the column only noted some assumptions and said nothing about the risks.

The **Zambia Component** PMU, in its Terminal Report, describes the process that has been carried out by the project to enhance the likelihood of sustainability. It also claims, quite rightly, that the project strategy of making the alternative land use approaches attractive to farmers and communities (through loans from the Revolving Fund, increased yields, better incomes, etc) underpins the project’s sustainability. The Terminal Report also describes the thorough and methodical exercise undertaken by the project through which specific components of the project were passed on, actively, to specific key organizations. Phase-out workshops were held in April 2012 and commitments were obtained to continue specific activities of the project. The activities are clearly spelled out in tables in the Terminal Report which identify the organization, the project component that is to be passed on, and “assumptions” which, in effect, are the actions that the organization needs to carry out to continue with the work of the project. The evaluator met with many of the organizations involved in this methodical handover and the commitments were clearly verified.

## 5.5.2 Institutional and social sustainability

Right across the board, the project has strived to build institutional capacity and it has been successful. Wherever possible it has worked through existing administrative structures and this has created a strong sense of ownership. Key government organizations have been actively involved technically, in an administrative and supportive role throughout project execution. And, where this was not possible for various reasons, the project engaged with stakeholders at local and community level. The project worked through existing government and non-governmental institutions to ensure ownership and the integration of project activities into the mainstream of district development plans,

community plans and aspirations. By working with traditional leadership project activities became an integral part of the village and area level development efforts, driven by the communities themselves. Some community members were adamant – “*we will continue, even without the project.*”

The institutional and social sustainability of project activities, together with their products, services and other benefits, is seen as **Highly Likely (HL)** at least at the local level.

### 5.5.3 Financial sustainability

Many of the plans, arrangements and other assumptions for handing over project components to inheriting institutions, involved the availability of financial resources. Sometimes this included the identification of potential sources of continuing or new funding support, but most often the strategy or plan did not go that far. At village and district level, where the project has managed to get a legislative basis for its new approach, funding could arise through various levies, taxes and licensing fees applied for natural resource use<sup>66</sup>. This will, in turn, depend on the right institutional and policy frameworks. Unfortunately, the local view was not always optimistic – according to a local government official in Kigoma, “*sustainability is not assured, because finance is not secure.*”

It was heartening for the evaluator to be assured by many key government institutions in all four of the riparian countries that they see project interventions to be part of their core function and that they will continue these through their institutional budgetary resources and through existing donor funding. However, this is easier said than done and without continuing external aid funding, financial sustainability is considered as only **Moderately Likely (ML)**.

### 5.5.4 Environmental sustainability

This was an environmental project and the security of environmental sustainability should be a foregone conclusion. However, more research, survey and analytical work is required before this can be assured. The MTE warned that without further research and analysis and without active management and monitoring, some of the land use activities advocated by the project could lead to an increase in erosion and subsequent sedimentation.

Research and monitoring are required in the medium to long term, to determine the comparative effectiveness of various land use practices in reducing sedimentation. Another aspect that requires better investigation is the effectiveness of riparian buffer strips, planted and allowed to mature.

One problem which is recognized widely but which is seen as too difficult to tackle is the problem created by deforestation for charcoal production. This seemingly intractable problem must be addressed if erosion and sedimentation are to be avoided. Simply legislating against tree cutting for charcoal production is not going to solve the problem because charcoal is often the only source of cooking fuel available to local communities. Although the promotion by the project of energy efficient stoves is a very positive step in the right direction, the only real solution lies in providing an alternative source of energy and this requires serious research and investigations.

Finally, environmental sustainability needs to take into account the changing climate. Research is required to devise strategies to overcome the negative impacts of climate change.

Without a fair degree of further research, investigation and analysis, environmental sustainability is seen as **Moderately Unlikely (MU)**.

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<sup>66</sup> The evaluator has reservations on the application of the “polluter pays principle” since this could lead to a reliance on pollution as a source of funding and wishes to note that regardless of how much the polluter pays, the lake will not get any better.

## 6 CONCLUSIONS, SUMMARY RATINGS AND LESSONS

### 6.1 Conclusions

#### 6.1.1 Project design and relevance

The project was very relevant to the Lake Tanganyika environment and the needs of the riparian countries, as well as the UNDP Country Programmes and the GEF objectives for international waters. This is not surprising since it arose out of an agreed Strategic Action Programme which was underpinned by a thorough and extensive Transboundary Diagnostic Analysis. This model, which has been applied extensively by the GEF in similar transboundary and shared bodies of water, has been effective in gaining the cooperation of the riparian states in their management of shared resources on a sustainable basis.

#### 6.1.2 Project implementation efficiency

This was a complex project with different implementation modes and it cannot have been easy for the PCU to hold it together as one project. Two countries were in a post-conflict situation with other pressing priorities, which is understandable. The other two countries, had a record of efficient national execution of projects and could be expected to do well. It is interesting to note that in the event, no pattern was discernible. Of the two countries that adopted the NEX implementation modality, one did very well and the other not so well; while of the two countries in the post-conflict recovery mode with agency execution, one also did very well and other not so well.

It would seem that the efficiency of project implementation was not influenced as much by the implementation modality, as by the circumstances surrounding the project and the expertise of PMs and PMUs. The PCU for the **Regional** component was in trouble at the time of the MTE, but it revived, recovered lost ground, and made very good progress with the arrival of a new PRC. Its rating was improved from Moderately Unsatisfactory (MU) to Moderately Satisfactory (MS) and had it not been dragged down by Outcome 2, this rating would have been higher. **Zambia**, which was in the NEX modality, with a very stable PMU and a skilful PM implemented the project very efficiently, proceeded at its own sustained speed and achieved a Satisfactory (S) rating overall. Whereas **Tanzania**, also in the NEX modality, had three different PMs and seemed to suffer from the distance between Dar es-Salaam and Kigoma – its overall rating was Moderately Satisfactory (MS). On the other hand, the **DR Congo** component which was agency executed and entrusted to WWF, was implemented very efficiently and achieved an overall rating of Satisfactory (S) in spite of the difficult circumstances – the choice of WWF as project implementer was instrumental in this success. In the case of **Burundi**, neither the PM nor the PMU were given much latitude for reasons which may have been valid at the time. The engagement of KEOC to manage the sewer reticulation works may have solved the problem of weak capacity but it introduced an element of inefficiency. It is possible that had the reticulation contract been handled at the PMU level with the full collaboration of SETEMU, project implementation may have been more efficient and the rating could have been better than the current Moderately Satisfactory (MS).

#### 6.1.3 Project results

The Outcome with the two most direct, explicit and visible results was the least successful. In Burundi, it suffered initially from Government decisions, and then from the difficulties which arose between two arms of the same organization. In Tanzania, the inability of the government to take up the NDF loan (despite the signed agreement between the two parties) to build the wastewater treatment plant deprived the project of the foundation on which its work was to be built.

It is interesting to note that the project was most successful when it worked at community level. Yet even here, it achieved few if any real results but as a foundational project<sup>67</sup> it designed and implemented a number of pilot level interventions which form the foundation for true results to arise in the future.

These intermediary results included capacity, awareness, demonstrations, governance frameworks, tools and methods. The project promoted new approaches to the use of land for agricultural purposes; it also built a strong case for the protection of forests and other vegetative cover; and, in doing so, it brought significant improvements in income that farmers earn from their work on the land and this has been translated into an improvement in their quality of life. The project has also raised awareness of the benefits that can arise through wise land use such as sustainable forest management, and conservation agriculture; it has also enhanced the capacity of local officials dealing with the primary production sector as well as those in local government. Even in wastewater management, where it has not been entirely successful, the project has raised awareness and sensitivity to the values and vulnerabilities of the lake and this is a valuable "result" at community level.

At the regional level, the project has been instrumental in the setting up and strengthening of the Lake Tanganyika Authority (LTA) and its various organs; in setting the foundation for joint management of the Lake's resources; in designing a regional monitoring system leading to a regional information management system. It has set the scene for cooperation and mutual sharing of know-how and expertise, problem-solving, benefits, responsibilities. Among the products that the project has produced or improved are the LTA itself, the Convention and its protocols, the revised and updated SAP and the NAPs.

The governments must now give effect to the cooperative framework which has been set up by the project for addressing priorities. Under the leadership of the LTA which will obtain their coordination, accountability, and feedback loops, the governments can achieve results they could not achieve on their own. They will also be able to assess the results achieved on a continuing basis through a joint monitoring programme. The project has provided momentum to the political commitment of the four governments to cooperate on the management of Lake Tanganyika and its resources for the common good of the inhabitants of the lake catchment.

#### **6.1.4 Monitoring and evaluation**

Monitoring is the repeated, regular measurement or observation of a pre-determined parameter in a strictly consistent manner. It records departures from the baseline as well as trends away from or towards established targets. Analysis of the data obtained from monitoring can be used to predict and forecast outcomes and corrective action can be implemented before impacts become irreversible.

Project monitoring usually refers to performance monitoring, which is a regular assessment of progress towards the project Objective and Outcomes often using Indicators. And, the results of performance monitoring are used to guide project implementation and revise and refine implementation plans through adaptive management.

Adaptive management is a formal, systematic, and rigorous approach to learning from the outcomes of management actions, accommodating change and improving management. It involves an analysis of the situation (the result of monitoring), exploring alternative actions and making explicit adjustments to the implementation strategy and the LogFrame.

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<sup>67</sup> Defined as one whose outcomes do not achieve results (*i.e.* changes in the development situation) but pave the way for results.

This evaluation addresses project monitoring as well as environmental monitoring as required under Outcome 4.

From the information available, it would seem that none of the components had an explicit Monitoring and Evaluation Plan. Apart from the position of M&E Director in the LTA, only the DR Congo Component had an M&E staff. This means that in the other components no project staff had specific responsibility for monitoring. On the other hand, M&E budgets appear to have been set aside in some cases. With the exception of the DR Congo Component, there were no explicit Baselines and many of the so-called Indicators were merely targets and did not satisfy the SMART criteria.

Environmental monitoring has been started by the project but it needs to be developed further, much further, before it becomes useful as a base for information and for decision-making. A strategy has been developed but implementation is some way off. What is needed is:

- A clear objective and justification for monitoring – why monitor?
- A portfolio of the least number and simplest parameters to be monitored, arising from the justification – monitor what?
- A system of measurements and observations which are repeatable and reliable – how monitor?
- Clear identification of the “clients” for monitoring results – monitoring for whose benefit?
- A clear commitment to act on the results of monitoring – monitoring what for?

Data gathering as described above is only the beginning of the process and even more important is the analysis, interpretation and manipulation of the data to convert them into information and knowledge.

Finally, there is a need to set up a system to archive, store and retrieve the information – an information management system. Since the data will be arising from a number of different localities, under different institutional systems and as it will need to retain its original identity while contributing to a “whole” which is greater than the sum of the parts, the information needs to be managed through a central metadatabase (at LTA level) which does not deny the discrete existence of the contributing databases.

### **6.1.5 Sustainability and proposals for future directions**

During my consultations and interviews with stakeholders at all levels, a message which was repeated often was for further continuing support through an extension of the project or a new follow-up project. Almost without exception, this request was made because of a misunderstanding of the aims, constraints and purpose of pilot interventions. However, regardless of this, the evaluator has recognized the need for further work at two levels – immediate extension of the present project and a distinct follow-up project and there may be merit in considering both of these.

In the present situation, the two results targeted under Outcome 2 in Kigoma and in Buyenzi have not been achieved. While the Kigoma wastewater treatment plant cannot be expected to be built within a reasonable time, there is optimism that the Buyenzi sewage reticulation could be taken to an acceptable level within a 2-3 month extension. Such an extension would also help to safeguard the investment made and reinforce project benefits. It would also strengthen the likelihood of sustainability for the project products and services.

In the longer term, it has to be recognized that of the countries surrounding Lake Tanganyika, only one is considered as lower middle income and the others are among the poorest. Without support, the region is not able to build on the achievements of the project and replicate the pilot activities so as to achieve the desired impacts. Neither can the region dedicate the resources necessary to continue with the implementation of the priorities identified in the SAP. Further support is essential

and involvement by the GEF is likely to leverage the further assistance needed through financing partners.

## 6.2 Summary of assessments made and ratings awarded

The following summary focuses on the key elements of the project, including all those that were required to be rated. They arise from the analyses made of the data and information obtained according to the evaluation matrix in Annex 4.

CRITERION	SUMMARY COMMENTS	RATING
<b>PROJECT FORMULATION</b>		
Project concept and design	While the project design was sound, the ProDocs were weak in some essential components such as the LogFrame, Indicators, Risk Management, Baselines and Targets. The wording used in the Outcomes was over-ambitious and not appropriate for a foundational project dealing with pilot scale work over a short four year timeframe. One further weakness in project design was the apparent lack of provision for collaboration, exchange and mutual learning. While this did take place at the political and high decision-making levels, and (although to a lesser extent) at the level of the respective Project Managers, the project did not facilitate communication at the technical levels, such as in water quality sampling or at the community level such as on cultivation and farming methodology	<b>Moderately Satisfactory (MS)</b>
Relevance	The institutional work at the LTA level, the cultivation work in the catchments, and the wastewater work carried out by the project were all highly relevant to the needs of the region and the needs of the four countries. This was to be expected since the project arose out of the long and thorough process of the Transboundary Diagnostic Analysis which led to the Strategic Action Programme which in turn spawned the project. The project is also seeking global benefits as targeted by the GEF which, under OP#9 sought the integration of sound land and water resource management strategies through changes in sectoral policies and activities that promote sustainable development	<b>Highly Satisfactory (HS)</b>
Stakeholder participation in formulation	Although project formulation coincided with the post-conflict period of two of the countries, accounts of broad stakeholder participation abound. This was in the TDA exercise and the formulation of the SAP (through GEF support) which together provided the foundation for the project. Stakeholder involvement ranged from regional (ILTMA, the precursor of the LTA) and national high level decision-makers, to communities who were consulted down to sub-district level for both catchment management and fisheries components.	<b>Satisfactory (S)</b>
<b>PROJECT IMPLEMENTATION</b>		
Project Governance	As with other aspects of this project, its governance was somewhat complex – there were five Steering Committees, one for each component. There were also local level Project Management Committees for some components. Performance was across a range and the rating reflects the middle ground	<b>Moderately Satisfactory (MS)</b>
Project Administration and Management	The ProDoc warned that “ <i>These management arrangements appear, at first sight, to be complex</i> ” and this evaluation has confirmed the complexity - there were three project documents, five project management units (one of which is designated as a coordinating unit), four national Project Steering Committees, three Executing Agencies. A further complication was the difference in effective starting dates for the different components and their different closure dates and/or extensions. This made cross-country management and coordination challenging – because the country Projects were at different steps in the project cycle. However, and in spite of this, the project was managed well overall.	<b>Satisfactory (S)</b>
<b>Implementation Approach</b>		

CRITERION	SUMMARY COMMENTS	RATING
Stakeholder participation in implementation and partnerships	Stakeholder involvement in project implementation has been at a high level, and this is particularly so for those at community and grassroots level	<b>Satisfactory (S)</b>
Risk management	Consideration of risks lacked the likelihood of the risk occurring. Neither did the ProDoc put forward any mitigation measures. There was also one risk which was not identified by the ProDoc – the risk arising from reliance by the project on a result from a co-funding agency activity, namely, the building of the Kigoma Wastewater Treatment facility through a loan from the Nordic Development Fund. When this unidentified risk cropped up, the project did not have a response	<b>Moderately Satisfactory (MS)</b>
<b>Project finances</b>		
Financial planning and management	Overall budget planning, management and reporting were weak throughout the five components. Not all PMs were in full “control” of their respective budgets; there was a case of financial misappropriation in DR Congo; and the impasse between UNDP and UNOPS on the Burundi statement of accounts remains to be resolved	<b>Moderately Unsatisfactory (MU)</b>
Co-financing	The ProDoc presents a very confused picture of the co-financing expected for the project. The information provided is ambiguous and the figures do not always add up. Co-finance was the subject of protracted exchanges with the respective PMU and even then, the information provided was often erroneous and/or incomplete. The role of co-financing is not well understood	<b>Moderately Unsatisfactory (MU)</b>
<b>Monitoring and Evaluation</b>		
M&E Design, Plan and Budget	None of the components had an explicit Monitoring and Evaluation Plan. Apart from the position of M&E Director in the LTA, only the DR Congo Component had an M&E staff. This means that in the other components no project staff had specific responsibility for monitoring. On the other hand, M&E budgets appear to have been set aside in some cases. With the exception of the DR Congo Component, there were no explicit Baselines and many of the so-called Indicators were merely targets and did not satisfy the SMART criteria	<b>Moderately Satisfactory (MS)</b>
Use of LogFrame and Adaptive Management	There is no evidence of systematic use of the LogFrame in monitoring and evaluation leading to adaptive management	<b>Moderately Unsatisfactory (MU)</b>
<b>Role and performance of IA and EAs</b>		
UNDP as the GEF IA	The role of UNDP as the GEF IA for this project represented a slightly different approach from usual, reflecting the specific and complex nature of this project. Two out of four Country Offices were involved directly in project execution while the other three components were the subjects of agency execution by UNOPS, and there was no lead Country Office to perform the role of IA. As a result, the RTA and the UNDP Regional Office provided far more support than is usual. The role of UNDP in this project also extended into co-financing and the Country Offices in Dar es-Salaam and Lusaka have made, and will make (for extensions), significant cash contributions.	<b>Satisfactory (S)</b>
EAs – UNOPS-IWC, VPO (Tanzania), MLNREP (Zambia), WWF, UNOPS-KEOC, ICRAF, IUCN	The performance of partners serving as Executing Agencies and sub-contractors ranged from Unsatisfactory to Satisfactory, with the latter pushing the balance towards a middle rating.	<b>Moderately Satisfactory (MS)</b>
<b>PROJECT RESULTS</b>		
<b>Attainment of Overall and Regional Objective and Outcomes</b>		
<b>Objective:</b> To implement the prioritised activities of the Strategic Action Programme so as to achieve sustainable management of the environmental resources of Lake Tanganyika	Only partial progress has been made towards the project Objective, however, and in spite of the weak and unhelpful indicators, the effort overall has been commendable and merits a rating which recognizes the significant improvement on the results seen at the time of the MTE and reflects the “turn around” that has been achieved	<b>Satisfactory (S)</b>
<b>Outcome 1:</b> Regional and national	The drafting and adoption of the NAPs by each of the four countries is a sign that the SAP has been internalized and that implementation has	<b>Moderately Satisfactory (MS)</b>

CRITERION	SUMMARY COMMENTS	RATING
institutions established and have internalized the implementation of the SAP and provide institutional support for the cooperative management of Lake Tanganyika under the ratified Convention.	begun. However, cooperative management of lake resources remains elusive – there are plenty of opportunities for the four countries to work together, share experiences, resolve mutual problems, and attain mutual benefits. The project has prepared the way for this and the Outcome has been partly achieved	
<b>Outcome 2:</b> The quality of water of Lake Tanganyika is improved at two identified pollution hotspots through enhanced wastewater management	The project was looking for a very simple result – <i>Water quality improvement at two locations</i> . In Kigoma, the project relied on a co-funded activity which did not eventuate while in Bujumbura the contractors have not delivered to the extent expected. This Outcome has not been achieved, however, KEOC may still deliver at Buyenzi, and the rating could be revised upwards	<b>Unsatisfactory (U)</b>
<b>Outcome 3:</b> Demonstration catchment management sites contribute to the reduction of sedimentation and provide significant livelihood benefits to local people, seeking long-term adaptation measures to changing climatic regimes	The project was looking for <i>Sediment discharge reduction</i> , and <i>Significant livelihood benefits</i> and from the PCU reports there are good signs that both have been obtained. And, in spite of the lack of a clear baseline and the far too short timeframe of the project, the evaluator was able to confirm reduced sediment loads at the pilot sites and very successful AIGs supported through efficient revolving funds with significant livelihood benefits	<b>Satisfactory (S)</b>
<b>Outcome 4:</b> Regional monitoring and management systems contribute to the long-term sustainable management of Lake Tanganyika and its natural resources	The Outcome sought <i>Regional monitoring and management systems</i> and the evaluator was looking for proof of regular monitoring and (adaptive) management. The evaluator is aware of a number of preparatory consultancies proposing various monitoring measures, and while some monitoring is known to have taken place, no monitoring “system” has been observed, and certainly not one which is producing data and information of use to managers and decision-makers. The draft Implementation Strategy is merely a proposal and the system has yet to be set up – this Outcome has only been partly achieved	<b>Moderately Satisfactory (MS)</b>
<b>Attainment of Burundi Outputs and Outcome</b>		
<b>Outcome:</b> Wastewater management in Bujumbura strengthened through infrastructure completion, standards implementation, and community awareness raising	Under the Burundi Component, the project sought completed infrastructure, standards adopted and implemented and raised community awareness – all this so as to achieve a decrease in point source pollution of the lake. In spite of the scope of work carried out, the Burundi Outcome has not been achieved. However, this could change significantly if the Buyenzi works are completed effectively	<b>Moderately Satisfactory (MS)</b>
<b>Attainment of DR Congo combined Outcomes</b>		
<b>Outcome:</b> Government and community natural resource management institutions strengthened with capacity to improve catchment status and reduce sediment load; <i>and</i> , The natural resource base in and around Uvira sustainably managed through improved land-	The DR Congo Component sought stronger institutions, improved catchment status with reduction in soil loss and sediment loads, and improved land-use practices. By and large these have been achieved and the DR Congo Component has been successfully executed	<b>Satisfactory (S)</b>



CRITERION	SUMMARY COMMENTS	RATING
use practices with reduced soil loss and sediment loads		
<b>Attainment of Tanzania Outputs and Outcomes</b>		
<b>Outcome 1:</b> Sedimentation into Lake Tanganyika from pilot villages is reduced through integrated catchment management, thereby improving lake habitats	The catchment works carried out by the project do represent a satisfactory approach to integrated catchment management. But the “monitoring” carried out (and the short timescale) was not adequate to establish whether this had any impact on the sediment load carried by the rivers. If results can indeed be seen, it is safe to assume that they are the result of the project, however, it is far too early to determine with any certainty that this has had a positive effect on lake habitats as targeted by the Outcome	<b>Moderately Satisfactory (MS)</b>
<b>Outcome 2:</b> Wastewater management at Kigoma-Ujiji Township strengthened, reducing point pollution levels of Lake Tanganyika waters and so improving biodiversity habitats	The basis for this Outcome was the construction of wastewater treatment facilities through a co-financed activity outside the influence of the UNDP/GEF project – unfortunately, this activity did not eventuate. Therefore, while the project may have strengthened wastewater management in Kigoma at the institutional capacity level, the ultimate outcome/result of reducing point sources of pollution and improving biodiversity habitats, strictly speaking, cannot be expected to be achieved	<b>Moderately Unsatisfactory (MU)</b>
<b>Attainment of Zambia Outputs and Outcome</b>		
<b>Outcome:</b> Levels of siltation/sedimentation in rivers flowing into Lake Tanganyika reduced in the pilot sites	The Zambia Component sought to reduce sedimentation and conserve biodiversity. From the information available, the first target of reduced sediment in rivers has been met or will be met. And although the conservation of biodiversity is not so easy to determine, the Zambia Outcome is considered to have been successful	<b>Satisfactory (S)</b>
<b>Sustainability</b>		
Institutional and social sustainability	The project has strived to build institutional capacity and it has been successful. It has worked through existing administrative structures and this has created a strong sense of ownership. Key government organizations have been actively involved technically, in an administrative and supportive role throughout project execution. And, the project engaged with stakeholders at local and community level. The project worked through existing government and non-governmental institutions to ensure ownership and the integration of project activities into the mainstream of district development plans, community plans and aspirations. By working with traditional leadership project activities became an integral part of the village and area level development efforts, driven by the communities themselves	<b>Highly Likely (HL)</b>
Financial sustainability	Many of the plans, arrangements and other assumptions in exit strategies for handing over project components to inheriting institutions, involved the need for financial resources. Sometimes this included the identification of potential sources of continuing or new funding support, but most often the strategy or plan did not go that far. At village and district level, where the project has managed to get a legislative basis for its new approach, funding could arise through various levies, taxes and licensing fees applied for natural resource use. This will, in turn, depend on the right institutional and policy frameworks. It was heartening for the evaluator to be assured by many key government institutions in all four of the riparian countries that they see project interventions to be part of their core function and that they will continue these through their institutional budgetary resources and through existing donor funding. However, this is easier said than done and its likelihood is not high	<b>Moderately Likely (ML)</b>

CRITERION	SUMMARY COMMENTS	RATING
Environmental sustainability	More research, survey and analytical work is required before environmental sustainability can be assured. Research and monitoring are required in the medium to long term, to determine the comparative effectiveness of various land use practices in reducing sedimentation, including riparian buffer strips, planted and allowed to mature naturally. The problem created by deforestation for charcoal production must also be addressed if erosion and sedimentation are to be avoided. Finally, environmental sustainability needs to take into account the changing climate. Research is required to devise strategies to overcome the negative impacts of climate change and capitalize on the positive impacts.	<b>Moderately Unlikely (MU)</b>
<b>OVERALL PROJECT RATING</b>	<p>The project was very focussed on the two SAP priorities of sediment load reduction and elimination of point sources of pollution. As such, it was very relevant to all four countries and the region. According to the Outcomes, it was to do this by strengthening regional and national institutions and creating the framework for cooperation; engaging local stakeholders in land use practices that prevent erosion and sediment run-off on a pilot/ demonstration scale in the expectation that the project achievements would be upscaled and replicated by those inheriting them; the diversion and treatment of waste streams in wastewater treatment facilities; and, the setting up of a regional monitoring system.</p> <p>The project appeared fully owned by the Governments and relevant people of Burundi, DR Congo, Tanzania and Zambia. It was reasonably governed and although aspects of its co-financing were not robust, and while its monitoring may not have led explicitly to adaptive management, overall it was well managed and it has been effective in achieving most of the intermediate results that it targeted.</p>	<b>Moderately Satisfactory (MS)</b>

## 6.3 Lessons that have emerged

### 6.3.1 Issue: Level of consultation by the evaluator

There was a deep feeling of appreciation expressed to the evaluator in Uvira by stakeholders at grassroots level for his insistence to accompany them as far and as high as was necessary to see at first hand the work that the project had helped them accomplish in their shambas. This rapport with community leaders and individual members built on the excellent rapport that had already been established by project personnel and served to enhance the likelihood of sustainability of project products and services. It also provided the evaluator with a perspective which could not have been obtained from anywhere else.

**Lesson:** The more opportunity for evaluators to work at grassroots level, the better basis for the evaluation and the stronger the chances of sustainability of project products and services.

### 6.3.2 Issue: Reliance on a co-funded activity as a pre-requisite

In Tanzania, the project design relied on an activity by the government which depended on a loan from a co-financing partner. For a number of reasons, the loan was not taken up (despite the fact that the loan agreement was signed before the UNDP-GEF project had been endorsed), the activity was not carried out, and the project output was left without its prerequisite thus negating the benefit which would have otherwise accrued.

**Lesson:** Reliance on another project as a prerequisite is very risky and project design must set up mitigation measures to deal with non-delivery by the other project.

### **6.3.3 Issue: Consistency at country level for project execution**

This project had a complex set of execution arrangements and while it may have been fully justified to entrust execution to a sister UN agency for two out of the four countries, it did create some resentment on the part of the affected governments. It did not help that the EA subcontracted a third party for one country and another arm of the same organization for the other country.

**Lesson:** To the extent possible, countries participating in regional projects should be treated equally, provided with the necessary support to make up for weaknesses in capacity, and allowed to participate as equal partners.

### **6.3.4 Issue: Documentation and data for the terminal evaluation**

There are a number of documents that are essential for the conduct of an evaluation. Among these are the ProDoc, Inception Report and PIRs. These documents go through various iterations and drafts before they are finally adopted. This leads to confusion as to which version is the final, adopted one and outdated versions are often given to evaluators.

**Lesson:** There is a need for the UNDP Evaluation Office to establish procedures to ensure that key documents provided to evaluators are the most up to date versions.

## **7 RECOMMENDATIONS**

### **7.1 Issue: Achievement and prowess should be recognized and capitalized on for the benefit of all**

The management of Lake Tanganyika and its natural resources is a multi-faceted task requiring a wide scope of expertise. Any evidence of ability and expertise within the region needs to be recognized and nurtured and taken advantage of for the benefit of all. Some other GEF-supported, transboundary, cooperative programmes have identified and supported “centres of excellence” among the participating countries. Through these centres, shared on an equitable basis, countries assume the lead for particular tasks or disciplines and serve as the prime focus (although not the only one) for the task or discipline. Among those that are emerging, the LTA may wish to consider Zambia leading on Revolving Fund, Burundi leading on Wastewater Treatment, DR Congo leading on Steep Fields Cultivation with the Contours, Tanzania leading on Solid Waste Management, etc.

#### **Recommendation:**

The LTA should identify the areas of work and initiatives that need to be tackled as an implementation of the SAP and in search of the sustainable management of Lake Tanganyika resources. In parallel, the LTA should investigate the levels of capacity and achievement, if any, in the four riparian countries in the relevant disciplines. It should then match the needs with the capacity and achievement and share the leads in an equitable fashion thus creating centres of excellence. The centres must not exercise any monopolistic claims on the respective work and initiatives, but function as firsts among equals.

### **7.2 Issue: More research required to ensure environmental sustainability**

A number of issues surrounding the sediment load carried by rivers were beyond the project to address. For example, the rivers which should be priorities for action, the correlation of land use with sediment load, the importance of the sediment bed load, etc. In addition, as warned by the MTE, without further research and analysis and without active management and monitoring, some of the land use activities advocated by the project could lead to an increase in erosion and subsequent sedimentation.

#### **Recommendation:**

In each of the four countries (including Burundi), the relevant government and private sector organizations responsible for Agriculture, Forestry, Water Management, Land-Use Planning and other relevant responsibilities should collaborate to formulate a joint proposal for a project which will research and monitor the comparative effectiveness of various land use practices to reduce sedimentation. The investigations should also cover the effectiveness of riparian buffer strips, planted and allowed to mature naturally. UNDP could advise on an appropriate source of funding support.

### **7.3 Issue: Further project extension**

The sewer reticulation in Buyenzi requires more time to be taken to a level whereby it could be claimed that the Outcome has been achieved to the extent possible. The evaluator has been advised that the contractor can extend the tertiary network to utilize remaining funds and make the system available for households to connect, and that this can be done by the end of July 2013. Although this component has already been granted two no cost extensions, the evaluator favours a further extension to allow this work to be carried out.

#### **Recommendation:**

UNDP should obtain the concurrence of GEF and reach agreement with UNOPS-IWC as the EA, for an extension of the Burundi Component until the end of July 2013. This extension will be at no additional cost to GEF. It will also be necessary to delay the wrap-up of the Regional Component until the end of August 2013 to allow for an orderly closure of the overall project.

### **7.4 Issue: New follow-up project**

Three of the countries surrounding Lake Tanganyika are classified as low income and one is considered as lower middle income. Without support, they are not able to build on the achievements of the project and replicate the pilot activities so as to achieve the desired impacts. Neither can they dedicate the resources necessary to continue with the implementation of the priorities identified in the SAP.

#### **Recommendation:**

UNDP should formulate a new project to be presented for funding to the GEF and other donor partners. The project should strengthen the LTA and promote its leadership role; it should focus on initiatives that require collaboration such as the regional monitoring system, fisheries management, applied research on the effectiveness of various farming techniques, exploring renewable energy to reduce reliance on charcoal and fuel wood. The project should run for five to six years and be executed regionally (possibly by the LTA) with leading positions assigned to the four countries on an equitable and capacity basis, and furthering the idea of centres of excellence proposed under 7.1 above.