



Private Public Partnership for Sustainable Land Management in the Shire River Basin

TERMINAL EVALUATION REPORT

Final version

27 April 2016

Private Public Partnership for Sustainable Land Management in the Shire River Basin

Terminal evaluation report

Date: 7 January 2016

Evaluation time frame: 2 November - 22 December 2015

Region and countries included in the project: Malawi

GEF Operational Program/Strategic Program: Land Degradation

Implementing Partner and other project partners: Ministry of Natural Resources, Energy and Environmental Affairs. Coordinated by the Environmental Affairs Department, the list of institutions include; Department of Forestry, Ministry of Irrigation and Water Development, Department of Land Resources Conservation, Department of Energy and Department of Climate Change and Meteorological Services.

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Executive summary

Project Summary Table

Project name:	Private Public Partnership for Sustainable Land Management in the Shire River Basin			
GEF Project ID:	PIMS 2085		<i>at endorsement</i> <i>(Million US\$)</i>	<i>at completion</i> <i>(Million US\$)</i>
UNDP Project ID:	00073331	GEF financing:	2,072,940.00	2,072,940
Country:	MALAWI	IA/EA own:		
Region:	AFRICA	Government:	400,000.00	400,000.00
Focal Area:	LAND DEGRADATION	Other:	600,000	600,000
FA Objectives, (OP/SP):		Total co-financing:	21,144, 940.00	21,300,000
Executing Agency:	Ministry of Natural Resources, Energy and Mines	Total Project Cost:	24, 216, 940.00	24,535,000
Other Partners involved:	District Councils	Pro-Doc Signature (date project began):		13 July 2010
		(Operational) Closing Date:	Proposed: 30 June 2014	Actual: 31 December 2015

Project Description

1. The UNDP/GEF's project "Private public partnership for sustainable land management in the Shire River Basin"¹ is a five-year nationally implemented project. The implementing partner is the Environmental Affairs Department in the Ministry of Natural Resource, Energy and Mines in Malawi.
2. The project was designed with overall goal of: "Sustainable Land Management" providing the basis for economic development, food security and sustainable livelihoods while restoring the ecological integrity of the Shire River Basin". The objective is: "To reduce land degradation in the Shire River Basin through improved institutional, policy and PES arrangements and improved food security". The project has four main components namely:
 - Outcome 1: The policy, regulatory and institutional arrangement support to Sustainable land management in the Shire River Basin;
 - Outcome 2: Private Public Partnerships (PPP) providing financial incentives for SLM (through green water credits and sustainable charcoal);
 - Outcome 3: Crop insurance providing the basis for increased access to credits as well as increased use of up to date weather information in decision making;
 - Outcome 4: Knowledge and skills for SLM provided to resource managers at all levels.

¹ further referred to as "the project"

3. The project was signed off on 13 July 2010. It was planned to close on 30 June 2014, but was extended firstly to 30 June 2015 and later to 31 December 2015. This project has been financed by GEF (US\$2,072,940), UNDP (US\$600,000), Malawi Government (US\$400,000) and planned co-funding from Public Sector, totalling of US\$21,144,940).

Evaluation Ratings:			
1. Monitoring and Evaluation	rating	2. IA& EA Execution	rating
M&E design at entry	4	Quality of UNDP Implementation	4
M&E Plan Implementation	4	Quality of Execution - Executing Agency	4
Overall quality of M&E	4	Overall quality of Implementation / Execution	4
3. Assessment of Outcomes	rating	4. Sustainability	rating
Relevance	6	Financial resources:	4
Effectiveness	4	Socio-political:	4
Efficiency	5	Institutional framework and governance:	4
Overall Project Outcome Rating	5	Environmental :	3
		Overall likelihood of sustainability:	4

Summary of conclusions, recommendations and lessons

4. The project Private Public Sector Partnership for Sustainable Land Management (SLM) Project in the Shire River Basin addresses the threats to the water provision of humans and ecosystems including related issues such as soil fertility, food security, energy and resilience to climate change. Therefore, the project is highly relevant not only in the context of the Shire River Basin, but for the entire country.
5. Important achievements of the project are among others:
- promotion of a multi-sector approach and partnerships in natural resources management;
 - promotion of integrated river basin management;
 - promotion of SLM at community and farm level;
 - promote innovative approaches on the policy agendas such as Green Water Credits, sustainable charcoal and weather information based crop insurance;
 - change of mind set with regard to sustainable charcoal;
 - provide important inputs in policy and legal frameworks;
 - reduction of environmental degradation in a number of pilot sites.
6. The following factors have hampered the project to achieve the targets set in its result framework:
- very ambitious targets in relation to the resources planned;
 - strong dependency on unreliable co-funding;
 - insufficient management capacity of the implementing partner;
 - insufficient additional support mechanisms/staff;

- insufficient leadership in relation to the technical and policy ambitions of the project;
 - incapability to deal effectively with the financial and administrative challenges;
 - insufficient interventions after the MTR.
7. Corrective actions suggested in relation to the design, implementation, monitoring and evaluation of future project are:
- NRM is long term issue and requires several project cycles;
 - Project objectives far too ambitious in relation to resources;
 - Monitoring implementation plan required;
 - Communication plan (internal, external) required;
 - Focus at catchments;
 - NGOs to be involved from very start of project;
 - Crop Insurance, GWC and Sustainable Charcoal require higher level champions to push agenda;
 - Consistent funding required to cope with seasonality.
8. Actions to follow up or reinforce initial benefits from the project are the following:
- Finalizing, circulating and systematically storing all project documents;
 - Workshop for sharing knowledge and lessons-learned before the end of project with stakeholders and related projects;
 - Release funding for SLM field activities of 2015/16 before project ends;
 - Upscaling interventions through government programmes and other projects;
 - Testing of charcoal kilns in project area and disseminating results;
 - Finalizing indicators and start pilot for GWC.
9. Proposals for directions in future initiatives for SLM interventions underlining the main objectives of the project are:
- Identify funding opportunities for crop insurance project;
 - Finalizing Forestry, Energy, Agriculture and Charcoal policy and legal frameworks;
 - Develop a national bushfire control strategy;
 - Moving towards establishment of protected areas in all steep areas under co-management.
10. Good practices in addressing issues relating to relevance, performance and success are the following:
- Adopting a multi-sector approach for the implementation of SLM interventions;
 - Concentrating interventions at catchment level in order to achieve synergy and to learn by measuring outcome;
 - To promoting natural forest regeneration as a cost effective approach maximizing ecosystem benefits;
 - Using existing Malawian experience with PES applied in wildlife conservation for the development of Green Water Credit Schemes;
 - Promoting sustainable charcoal in order to counter the pressure on forest resources.
11. Bad practices in addressing issues relating to relevance, performance and success are the following:
- Being over ambitious and desiring to achieve too many objectives during a limited time span and limited resources;
 - Building ambitions for a considerable part on uncertain co-funding contributions;

- Underestimating the importance of the implementation of a sound communication strategy as integral part of the project strategy;
- Underestimating the importance of SMART impact monitoring as the basis for adaptive result management;
- Underestimating the crucial importance of efficient administrative management for the progress of project interventions.

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Acronyms

ADC	Area Development Committee	MCA-M	Millennium Challenge Account of United States-Malawi Chapter
ADFO	Assistant District Forestry Officer	MERA	Malawi Energy Regulatory Authority
ADRA	Adventist Relief Agency	MF	Maphunziro Foundation
AEDO	Agricultural Extension and Development Officer	MFPEd	Ministry of Finance, Planning and Economic Development
BK	Balaka District	MGDS	Malawi Growth and Development Strategy
BT	Blantyre District	MHH	Male Headed Household
BWB	Blantyre Water Board	MK	Malawi Kwacha (1 USD = 596.151 MK, 25/11/2015)
CA	Conservation Agriculture	MNREE	Ministry of Natural Resources, Energy and Environment
COPRED	Community Partners for Relief and Development	MNREM	Ministry of Natural Resources, Energy and Mining
COVAMS II	Community Vitalization and Afforestation in Middle Shire	MOAIWD	Ministry of Agriculture, Irrigation and Water Development
CURE	Coordination Union for the Rehabilitation of Environment	MTR	Mid Term Review
DAPP	Development Aid People To People	NACOHUSO	Nature Conservation & Humanitarian Support Organization
DC	District Commissioner	NE	Neno District
DCCM	Department of Climate Change and Meteorology	NEMA	National Environment management Authority
DEC	District Executive Committee	NGO	Non Government Organization
DFO	District Forestry Officer	NRM	Natural Resources Management
DOF	Department of Forestry	PDRP	Post Disaster Recovery Project
DPD	District Director of Planning	PERFORM	Protecting Ecosystems and Restoring Forests in Malawi
EAD	Environmental Affairs Department	PES	Payment for Ecosystem Services
EDO	Environmental District Officer	PIF	Project Identification Form
EPA	Extension Planning Area	PIR	Project Implementation Report
ESCOM	Electricity Supply Commission of Malawi	PMU	Project Management Unit
EU	European Union	SLM	Sustainable Land Management
FF	Farm Families	SMART	Specific, measurable, Attainable, Replicable and Timely
FHH	Female Headed Households	SRB	Shire River Basin
FR	Forest Reserve	SRBMP	Shire River Basin Management Programme
GEF	Global Environmental Facility	ToR	Terms of Reference
GOM	Government of Malawi	UNDAF	United Nations Development Assistance Framework
GVH	Group Village Headman	UNDP	United Nations Development Programme
GWC	Green Water Credits	WESM	Wildlife and Environmental Society of Malawi
HH	Household		
JICA	Japan International Cooperative Agency		
LDF	Local Development Fund		
LRCD	Land Resources and Conservation Department		
MCA	Millennium Challenge Account		

1 Introduction

1.1 Objectives and scope of the Terminal Evaluation

The Terminal Evaluation was carried out in November - December 2015. The objectives of the Terminal Evaluation are to

- assess the achievement of project results, outcomes and impacts;
- draw lessons that can both, improve the sustainability of project benefits and enhance overall UNDP programming;
- assess extent to which the project was successfully mainstreamed with other UNDP priorities (poverty alleviation, governance, resilience and gender).

The scope of the evaluation is to:

- comment on the conceptual framework of the project;
- reflect on the underlying logic model of the project;
- evaluate the relevance of SLM Project against other programming areas of the UNDP (food security, poverty, natural disaster mitigation and governance);
- comment on the indicators of the project;
- identify and analyze the main project successes and challenges and the various factors that contributed to such a performance, focusing on the quality and sustainability of the interventions and the ability of participating stakeholders (Ministry, NGOs, CBOs) in planning and implementing project activities;
- assess the efficiency and effectiveness of program management and resource management structure established to support project implementation at management unit and ministerial department level;
- assess current and likely impacts of the SLM project in arresting environmental degradation in the Shire River Basin;
- make specific actionable recommendations based on lessons learned and challenges on how to improve performance of similar GEF projects in future.

The evaluation used the DAC criteria for project evaluation (relevance, effectiveness, efficiency, sustainability and impact - see text box on the next page). Successes and challenges in the implementation of the interventions by various NGO and CBO partners have been documented with reference to set targets and milestones in the project strategic framework and lessons learned have been drawn from the SLM project. These lessons have been used to make specific actionable recommendations in the evaluation report and will form the basis for related projects in the future.

Furthermore, the working interface has been evaluated among EAD, NGOs and CBOs implementing activities on the ground as well as the use of PPPs for effective delivery of project activities. Synergies have been highlighted among the interventions in this project and the broader UNDP programming covering poverty, food security, governance, natural disasters and diversification aiming at solving food insecurity and poverty in the Shire catchment.

Current and likely future impacts of the SLM project were assessed on communities, partner NGOs/CBOs and reduction in environmental degradation. Additionally, the quality was assessed of the management capacity, established to support project implementation, including operational levels at NGOs and CBOs. Lastly, sustainability of the interventions was assessed as well as the ability of the communities and CBOs to sustain the activities. The latter aspect covered the capacity building efforts at community level (and CBO, district level) to ensure sustainability while highlighting identified challenges. The evaluation was concluded by highlighting lessons learned for the future and making actionable recommendations to the client for future GEF related projects in Malawi.

Relevance concerns the extent to which a development initiative and its intended outputs or outcomes are consistent with national and local policies and priorities and the needs of intended beneficiaries. Relevance also considers the extent to which the initiative is responsive to donor policies and priorities.

Effectiveness is a measure of the extent to which the initiative's intended results (outputs or outcomes) have been achieved or the extent to which progress toward outputs or outcomes has been achieved.

Efficiency measures how economically resources or inputs (such as funds, expertise and time) are converted to results.

Sustainability measures the extent to which benefits of initiatives continue after external development assistance has come to an end.

Impact measures changes in human development and people's well-being that are brought about by development initiatives, directly or indirectly, intended or unintended.

1.2 Methodology

The evaluation (TE) was carried out according to UNDP guidelines of results based evaluation and according to the Terms of Reference related to the assignment provided by UNDP (Appendix 1, page 55).

The TE included a preparatory desk study to familiarize the evaluators with the project and its environment and to focus evaluation questions and criteria. The following information has been collected and used:

- documents related to the project cycle (e.g. ProDoc, logical framework, Inception Report, Quarterly Progress Reports, AWP's, SC meeting minutes, CTA Mission reports, APRs, PIRs),
- documents produced by the project on technical and strategic issues,
- background documentation, maps and internet sources.

Based on the preparatory desk study, issues and questions as specified in the ToR were elaborated, and an Inception report prepared and shared with UNDP and the project. The Inception report was discussed and approved during the Inception meeting (7 November 2015) by UNDP and the project.

The following approaches have been used for additional information collection in Lilongwe and the project area:

- (1) meetings and individual interviews with stakeholders (government and local) based on preset criteria and questions. During the briefing the appropriate setting for exchange with stakeholders will be determined in order to take "current culture" into account.

- (2) analysis of monitoring data from various project reports.
- (3) use of secondary statistics (biodiversity, environment, socio-economics).
- (4) project site visits including meeting local stakeholders.

Analysis and assessments are done following the DAC criteria for evaluating development projects. Evaluation questions (Appendix 8, page 81) in relation to these criteria have been formulated to guide the interviews and discussions, mainly addressing aspects such as perceptions, constraints, challenges, success factors and suggestions related to design, implementation and achievement. No questionnaires have been used but focal group sessions and key informant interviews were conducted at community level and for other partners.

A sustainability analysis included sustainability criteria such as (a) sustainability in terms of developed manpower and skills, (b) policy support measures, (c) economic and financial sustainability, (d) political embedding, (e) socio-cultural embedding, (f) appropriate technology, (f) environmental protection, (g) institutional management capacity and replicability.

After the field mission, the preliminary findings and recommendations have been presented in a debriefing meeting with UNDP, the project team and other key stakeholders.

Data analysis consisted partly of triangulation of qualitative information as well as simple statistical analysis to visualize quantitative data on the project context and impact. A project progress table has been prepared to show the progress and achievements of the different project components (Appendix 10, page 84). Ratings have been applied to aspects of key criteria concerning the implementation approach and management (ToR, Annex E, page 68).

A draft evaluation report was composed according to the format defined in the Terms of Reference. After circulation of the draft report, the final evaluation report is drafted integrating the reviewers' comments.

1.3 Mission implementation

The evaluation was carried out by Floris Deodatus (environmental expert and team leader) and Kenneth Wiyo (water management expert and national consultant) with logistic support from the project. During the mission's first week stakeholders based in Lilongwe were interviewed. The emphasis of these interviews was on project implementation and technical issues mainly. During the second week the consultants visited the project sites in Balaka, Mwanza, Neno and Blantyre Districts as well as stakeholders in the district capitals of Balaka, Blantyre, Mwanza and Neno. During the field visits the team was accompanied and assisted by one Government staff member of the project (EAD) to assist in contacting officials and to support information collection. After the field visits, the evaluators conducted final interviews with stakeholders with emphasis on issues raised with the project, the Project Steering Committee and UNDP, as well as on strategic issues with donors.

The (in-country) mission was completed with a debriefing with the stakeholders meeting in Lilongwe on 18 November at the end of the in-country mission. Not all key stakeholders were however present during this meeting (Appendix 6, page 78).

The final evaluation report was completed in January 2016. However, UNDP requested the evaluation team to prepare a final version after the problems with the installation of an automatic weather station observed during the evaluation (see section 3.3.2, page 36, and section 3.3.3, page 39, as well as footnotes) had been sorted out by the project and verified by UNDP. The problems were solved in February 2016 and after a field visit for verification carried out by UNDP in March the present last version of the evaluation report was prepared.

A time schedule of the mission is presented in Appendix 2 (page 72).

1.4 Structure of the report

The evaluation report follows the structure as required by the ToR presented to the evaluators (ToR, Annex G, page 69).

2 Project description and development context

2.1 Project start and duration

13. The UNDP/GEF project "Private public partnership for sustainable land management in the Shire River Basin" is a five-year nationally implemented project.
14. A concept document for the SLM project (PIF) was approved in the GEF Work Programme in June 2007. It was approved as a Full Scale Project (FSP) by GEF Council in December 2008. According to the PIF, the implementation of the project was supposed to start in February 2009 with a Mid-term review in December 2010 and the completion of the project in March 2013. However, the project implementation was delayed and the start date was moved to April 2010, with an end date in March 2014. However, the project was signed in July 2010 with an end date in June 2014. The funds were eventually disbursed in October 2010 and the final date again shifted to 30 June 2015, and later extension to 31 December 2015 was approved following more start-up delays and due to the importance attached to the project by the Malawi government.

2.2 Problems that the project sought to address

15. Land degradation in the Shire Basin is driven by poor agricultural practices and deforestation. The major factors contributing to land degradation are negative interrelationship among high dependency on natural resources, unsustainable resource management practices, poverty, rapid population growth, ineffective policy implementation and poor economic development.
16. Extensive unsustainable land use has resulted in severe land degradation and soil erosion, which have led to siltation of the Shire River and its tributaries, consequently affecting hydro-electric power generation, human health and fisheries. These have been further exacerbated by unsustainable use of biomass for fuel.
17. The SLM project aims at contributing to "Sustainable Land Management" thereby providing the basis for economic development, food security and sustainable livelihoods while restoring the ecological integrity of the Shire River Basin".

2.3 Immediate and development objectives of the project

18. The project was designed with overall goal of: "Sustainable Land Management" providing the basis for economic development, food security and sustainable livelihoods while restoring the ecological integrity of the Shire River Basin". The objective is: "To reduce land degradation in the Shire River Basin through improved institutional, policy and PES arrangements and improved food security.
19. The project has four main components (Table 1, page 19) and the full results framework is presented in the ToR, Annex B (page 61).

Table 1. Project outcomes and outputs

• Outcomes	• Outputs
Outcome 1: The policy, regulatory and institutional arrangement support sustainable land management in the Shire River Basin	<ul style="list-style-type: none"> • Output 1.1: Alignment of sector policies improved: • Output 1.2: SRB Development Authority formed improve coordination of SLM, environmental management & development in Basin
Outcome 2: Private Public Partnerships (PPP) providing financial incentives for SLM (through green water credits and sustainable charcoal).	<ul style="list-style-type: none"> • Output 2.1: Green Water Credits Scheme operationalized to provide financial incentive for SLM: • Output 2.2: Sustainable charcoal providing additional income as an incentive for sustainable woodlands management:
Outcome 3: Crop insurance providing the basis for increased access to credits as well as increased use of up to date weather information in decision making.	<ul style="list-style-type: none"> • Output 3.1: Index-based crop insurance piloted using lessons learnt during the initial pilot to refine the scheme: • Output 3.2: Improving weather data generation and use in decision making:
Outcome 4: Knowledge and skills for SLM provided to resource managers at all levels.	<ul style="list-style-type: none"> • Output 4.1: Application of knowledge to support SLM implementation by farmers and rehabilitation of specifically degraded communal lands. • Output 4.2: Support to increase forest and plantation forest productivity • Output 4.3: A participatory M&E system designed and used to monitor ecosystem health and improvements in livelihoods • Output 4.4 Increased Socio-economic demographic income in the project area

2.4 Baseline Indicators established

20. At the start of the project the following baseline indicator levels have been determined for the SRB at project objective level (Annex B, page 61):
- Minimal land being managed in accordance with principles of SLM or integrated water and land management;
 - Deforestation in SRB is currently 6% per annum in the SRB;
 - Woodlands are currently seriously degraded with many bare patches;
 - Currently no sustainable charcoaling and hence no carbon emission mitigated by sustainable charcoal;
 - More than 85% of land experiencing serious forms of erosion;
 - More than 95% of households below the UN defined poverty line.

2.5 Main stakeholders

21. The project is being coordinated by the Environmental Affairs Department (EAD) of the Ministry of Natural Resources, Energy and Mining. Actual implementation has been done through the relevant Ministries including Natural Resources, Energy & Mining, Agriculture and Food Security, Irrigation and Water Development Tourism, National Parks and Wildlife, involving respective Departments under these Ministries of Environment, Forestry, Fisheries, Land Resources, Energy and Irrigation as

well as the branches of these services at district level. Furthermore, at local level communities and local leaders participate as well as a number of NGOs contracted by the project. The private sector is represented by a number of facility agencies with interest in Payment for Ecosystem Services (PES) activities in the project such as Blantyre Water Board (BWB), Southern Region Water Board, (SRWB) and ESCOM).

2.6 Expected Results

22. The expected results of the SLM project are the introduction of interventions helping communities to address real causes of land and water resources degradation in the Shire River Basin while building the community resilience to adverse effects by creating sustainable food production systems that also help raise the income of the communities. These interventions include conservation agriculture, fruit tree production integrated with overall re-afforestation programmes, fish farming, bee keeping and chicken rearing.
23. Besides these "conventional" SLM practices, the project's expected results includes the piloting of three innovative and fairly new technologies for SLM, even from a global perspective, namely the Green Water Credits Scheme, Sustainable charcoal and a Weather Index Based Crop Insurance Scheme.

3 Findings

3.1 Project Design and formulation

3.1.1 Analysis of project strategic framework

24. The project document identifies the following barriers impeding the wide scale adoption of SLM in the SRB:
- (1) Weaknesses in the policy, planning and institutional environment that influence SLM;
 - (2) Weak incentives for adoption of SLM;
 - (3) Weak capacities and inadequate skills at all levels required for promoting and/or adopting SLM.
25. An ambitious set of expected outcomes have been formulated to deal with these barriers, which have resulted in the results framework of the project (ToR, Annex B, page 61).
26. Some of the indicators under outcome 1 refer to the operationalization of the activities under the respective policies (e.g. revenues from charcoal, beekeeping) instead of the actual results (finalized institutional and policy frameworks). As a result targets are not compatible with the outcomes and a mix-up of results is reported under Outcome 1 and Outcome 4.
27. Sustainable Charcoal and Green Water Credit are introduced as Payment for Ecosystem Services mechanisms to improve incentives for SLM. However, the relevance of the development of a weather based crop insurance index in this context is doubtful. This would rather be an instrument to support the resilience of farmers to climate risks and the relation of Outcome 3 with the project's objective is therefore less clear.
28. Although the problem analysis in the project document indicates that unsustainable livestock grazing is one of the factors responsible for land degradation, countering this issue is not included in the project's strategy.

3.1.2 Assumptions and Risks

29. The mitigation measures in the risk analysis insufficiently address the risk of competing priorities on the agendas of government entities at central and district level. To promote the SLM agenda effectively would have required an elaborate communication plan spelling out communication objectives, targets and channels. Such a plan to overcome for example the existing resistance against sustainable charcoal in various governmental agencies could have resulted in a much better achievement of the targets set for the development of sustainable charcoal.
30. The risk assessment identifies the uncertainty of the voluntary carbon market to make the difference for sustainable charcoal. *"During the project implantation, the project will further advertise the initiative widely and search for voluntary markets still active. It is also expected that the current global financial crisis will soon be over; also the imperative to invest in mitigation is still growing"* is however not convincing mitigation.

31. The risk assessment only covers the risks of hesitation from the side of insurance companies. However, it seems to overlook the readiness of small farmers to pay for a service which provides them with "invisible" certainty, but will only provide visible benefits after a drought or flooding. It is not improbable that many farmers will quit after several years without pay-out due to favourable weather conditions.
32. The significant ambitions of the project are based on about 85% co-funding. This is an underestimated risk with regard to the realization of these ambitions.

3.1.3 Lessons from other relevant projects incorporated into project design

33. The SLM project incorporated lessons learned from other similar projects like TLC (Total Land Care Projects); MEMP (Malawi Environmental Monitoring Program, IRLADP (Irrigation, Livelihoods Agricultural Development Project) and FIDP (Farm Income Diversion Programme). Key lessons incorporated in project design include the need for multi-sector approach; working through decentralized district and village structures and committees; balancing short-term economic gains with long-term SLM activities to ensure that communities see immediate benefits from SLM activities that tend to be long-term. The SLM project involved a number of government departments working together at district and community level but also made sure that communities derive immediate benefits from their involvement in SLM activities. This was achieved by promoting alternative IGAs that brought income in the short term such as bee-keeping, fish farming, cassava cuttings and value adding agricultural commodities.
34. Key lessons not incorporated in the project design were the fact that SLM activities are long-term and the five-year time-frame given to the SLM project was short. Ideally, it should have 10 to 15 years in order to see impact meaning five year project renewed once or twice. Further, the project budget was low given the many objectives of the project.

3.1.4 Planned stakeholder participation

35. The stakeholders of the SLM project included government officials (at national, district and local levels), parastatal utilities (ESCOM, Water Boards), private sector companies and local communities (farmers and charcoal producers). The NGO CURE was included in the Project Steering Committee to represent the NGOs active in the sector. The involvement of NGOs in the project implementation came in after a bidding process the last year of the project in an attempt to speed up implementation of project activities. The design of the project assured intensive participation of all relevant stakeholders related to land management of SRB at all levels.

3.1.5 Replication approach

36. The project's replication approach is based on the evident demand for upscaling SLM application in the frame of current programmes (e.g. NAPA, SIP, and UNDAF). Within the contours of the SLM project it overlooks the risk of not obtaining co-funding and the eventual incapability to establish the SRBMA which is also presented as a foundation for upscaling. Furthermore, upscaling also depends on the development of essential enabling frameworks (particularly for GWC and sustainable

charcoal) by the project. Delayed or not accomplishment of this output therefore forms a risk to replication.

3.1.6 UNDP comparative advantage

37. UNDP's coordinates the UN Country Team in Malawi with regard to programming of development activities of the Participating UN Organizations and their national partners in the frame of the UNDAF Action Plan. UNDP programmes focus on capacity development and policy support including leadership development aimed at improving the capacity of the public service to deliver quality services by enhancing strategic thinking, policy-making, risk analysis and management of capacity weakened by the AIDS epidemic and exacerbated by poverty, recurring disasters and food insecurity.
38. A key role for UNDP in this project is evident because of the multiple sectors involved in this project and the crucial contributions to policy development required.

3.1.7 Linkages between project and other interventions within the sector

39. At the start of the project, it was anticipated that the project would scale-up normal SLM activities done by government sector departments at the district level. The SLM project used the very same staff for its activities. The SLM activities anticipated were also being done by NGOs in different districts at different levels. Other donors like JICA (COVAMS), World Bank (SRBMP) and USAID (PERFORM, MCI) were also lining up future activities targeting the same Middle Shire Catchment. The SLM project did provide key inputs like knowledge reports and the Shire River Basin Authority idea to these projects.
40. At district levels, these other projects and NGOs were informed of each other's activities including SLM project activities through briefings at DEC (District Executive Committee). Because of this interface, development partners, government staff and NGOs were aware of the SLM project in the four districts. Agreements were made with particularly COVAMS II to avoid overlapping interventions and to achieve synergy. COVAMS worked for example on soil erosion and fertility analysis relevant for the GEF project.

3.1.8 Management arrangements

41. The project has been executed under UNDP NEX procedures by the UNDP Malawi as the GEF Implementing Agency. Monitoring and supervision was taken care of by an Outcome Board (UNDP and MFPED) and a Steering Committee (Project Board: UNDP, MNREE, NEMA).
42. MNREM is also the Government Implementation Agency responsible for the implementation of the project. Day to day management of the project is provided by the Project Manager.
43. The Project Document extensively lays out the role and tasks of the Output Board, Steering Committee and Project manager. The Project Manager has been jointly appointed by UNDP and MNREM. However, the role of MNREM is not well elaborated in the ProDoc, and there is no mention and clarification of the tasks and roles of the Project Coordinator, who is an officer of the MNREM also tasked with managerial responsibilities in the project.

44. According to the ProDoc, the project was supposed to be supported by a Technical Advisor, an Administrative Assistant and a Driver being part of the Project Management Unit (PMU). However, following a new policy of the Malawi Government (2010) to improve project sustainability by maximum implementation through government staff, no Administrative Assistant and driver have been appointed.
45. Liaison with other government departments at central and district level was assured by focal persons in these departments. The Technical Advisor was supposed to play a crucial role here by assuring technical and scientific quality of outputs, particularly reports.

3.2 Project Implementation

3.2.1 Project Finance

46. The total project budget (GEF + UNDP) was US\$ 2,672,940 (Table 2, page 25) excluding a contribution (mainly in kind) expected from the Malawi Government of US\$ 400,000. As of 31 October 2015 project expenditures (GEF + UNDP) amounted to US\$ 2,922,279. This amount is higher than initially budgeted as UNDP increased its contribution (Table 3, page 25).
47. Disbursement in relation to budgets in work plans shows irregular spending in successive years under different outcomes (Table 4, page 26). During the first years of the project there was significant under-spending but in 2012 the project started to catch up. The table clearly shows that spending under outcome 2 (PPP) is very low, which is obviously related to slow progress under this outcome. The overall overspending (109%) already in October 2015 is caused by the fact that UNDP has increased its financial contributions to the project from US\$ 600,000 to 991,707². High UNDP expenditures for project management in 2014 (US\$ 291,716) were however difficult to understand and insufficient information was available to the evaluation team to find out if these expenditures were correctly booked (Table 7, page 27).
48. UNDP co-funding to the project was higher, but estimated co-funding (in kind) from the government³ were lower than initially planned (Table 5, page 26). No other real co-funding materialized for the project (total planned US\$ 21,144,000), but during the lifetime of the SLM project, other projects on SLM in the SRB evolved and collaborated closely (Table 6, page 26).
49. Two audit reports (2013, 2014) have been consulted by the evaluation team. A number of minor administrative issues signalled in 2013 have been solved in 2014. The evaluation team noted however that the absence of labels on equipment purchased from project resources observed by both audits, have still not been addressed.

² total expenditures of UNDP budgets from 2010 to 2014 were US\$ 774,707 and UNDP budgeted for 2015 US\$ 217,000

³ Government co-funding was estimated by adding salaries and allowances of government staff as well as expenditures for rentals, electricity and water of offices in all project districts and Lilongwe

Table 2. Annual budgets according to annual workplans⁴

		2010	2011	2012	2013	2014	2015	Total*	Total
Project management	UNDP	100,000	14,000	66,200	58,700	47,500	67,500	120,000	330,000
	GEF		204,000	291,780	296,500	239,000	34,465	210,000	
Outcome 1 - policy	UNDP		20,000	2,500	14,500	0	5,000	120,000	520,000
	GEF		140,000	60,000	102,500	33,500	15,000	400,000	
Outcome 2 - PPP	UNDP		86,000	15,500	15,500	24,500	85,000	120,000	889,940
	GEF		210,800	133,000	183,500	57,500	26,000	769,940	
Outcome 3 - Crop insurance	UNDP		30,000	18,000	13,000	9,500	45,000	120,000	480,000
	GEF		78,700	96,500	80,500	30,500	6,000	360,000	
Outcome 4 - Knowledge & skills	UNDP		0	85,300	98,300	56,500	14,500	120,000	453,000
	GEF		86,500	91,500	93,000	26,500	55,500	333,000	
TOTAL UNDP	UNDP	100,000	150,000	187,500	200,000	138,000	217,000	600,000	2,672,940
TOTAL GEF	GEF		720,000	672,780	756,000	387,000	136,965	2,072,940	
TOTAL		100,000	870,000	860,280	956,000	525,000	353,965	2,672,940	

Table 3. Expenditures of GEF and UNDP per Outcome and per year (source: Combined Delivery Report by Activity With Encumbrance - UNDP)

		2010	2011	2012	2013	2014	2015	Total	Total
Project management	UNDP	29,888	3,326	21,603	40,860	291,716	16,536	403,930	1,114,382
	GEF		68,591	326,143	280,599	29,943	5,177	710,452	
Outcome 1 - Policy	UNDP			3,979	13,380	27,263	10,686	55,308	454,626
	GEF		96,868	39,939	113,872	138,445	10,194	399,318	
Outcome 2 - PPP	UNDP			2,133	3,439	9,416	7,414	22,402	278,631
	GEF		4,113	68,616	131,453	39,992	12,055	256,229	
Outcome 3 - Crop insurance	UNDP		8,700	13,783	43,277	116,386	13,608	195,754	497,699
	GEF			56,593	105,832	61,443	78,077	301,945	
Outcome 4 - Knowledge & skills	UNDP		10,835	36,083	55,781	13,315	23,182	139,196	495,025
	GEF		217,307	59,096	44,978	32,761	1,687	355,829	
TOTAL UNDP	UNDP	29,888	22,861	95,602	158,388	467,968	76,054	850,761	2,922,279
TOTAL GEF	GEF	0	386,879	571,649	695,751	308,171	109,067	2,071,518	
TOTAL		29,888	409,740	667,251	854,139	776,140	185,121	2,922,279	

⁴ The project document presents budgets per project outcome for the GEF contribution but not for the UNDP contribution. In the table the total UNDP contribution is divided by 5 equalling contributions to outcomes and project management.

Table 4. *Project expenditures combined from GEF and UNDP funding in relation to budgets as of 31 October 2015*

	2010	2011	2012	2013	2014	2015	Total
Project management	30%	33%	97%	91%	112%	21%	338%
Outcome 1 - policy	0%	61%	70%	109%	495%	104%	87%
Outcome 2 - PPP	0%	1%	48%	68%	60%	18%	31%
Outcome 3 - Crop insurance	0%	8%	61%	159%	445%	180%	104%
Outcome 4 - Knowledge & skills	0%	264%	54%	53%	56%	36%	109%
TOTAL	30%	47%	78%	89%	148%	52%	109%

Table 5. *Co-funding realized as of 31 October 2015*

Source	Realized co-funding
UNDP	US\$ 991,707
Government of Malawi (in kind)	US\$ 114,233
Total	US\$ 1,105,940

Table 6. *SLM-related budgets of projects which can be considered as co-funding*

Project / Donor	Budget for SLM-related activities
SRBMP (SLM activities) 2013 - 2018	US\$ 63,860,000
COVAMS II 2012 - 2017	JPY 500,000,000 (US\$ 4,061,079)
MCA 2013 - 2018	US\$ 4,000,000
PERFORM 2014 - 2019	US\$ 8,000,000
DFID 2011 - 2016	UK£ 5,000,000 (US\$ 7,555,500)
UNDP (PDRP) 2015 - 2016	US\$ 1,000,000
GCCA programme (EU / FAO) 2015 - 2020	EU€ 8,000,000 (US\$ 8,701,610)

Table 7. Part of the project management expenditures from the UNDP budget in 2014 (excerpt from Combined Delivery Report by Activity With Encumbrance 2014)

Fund : 04000 (TRAC (Lines 1.1.1 and 1.1.2))		
61305 - Salaries - IP Staff	0.00	83,661.97
61310 - Post Adjustment - IP Staff	0.00	32,300.54
62310 - Contrib to Jt Staff Pens Fd-IP	0.00	26,510.52
62315 - Contrib. to medical, social in	0.00	2,098.19
62320 - Mobility, Hardship, Non-remova	0.00	27,180.00
62340 - Annual Leave Expense - IP	0.00	5,424.26
63330 - Ed Grt Incl Trvl&Allow-IP Stf	0.00	12,373.21
63335 - Home Leave Trvl & Allow-IP Stf	0.00	3,699.96
63520 - Personal Security Measures	0.00	895.64
63530 - Contribution to EOS Benefits	0.00	4,348.58
63535 - Contribution to Security	0.00	7,345.13
63540 - Contribution to Training	0.00	1,391.55
63545 - Contribution to ICT	0.00	1,739.42
63550 - Contributions to MAIP	0.00	579.81
63555 - Contribution to UN JFA	0.00	2,667.17
63560 - Contributions to Appendix D	0.00	347.85
64308 - Appointments-Lump Sum	0.00	9,621.13
65115 - Contributions to ASHI Reserve	0.00	9,277.01
65135 - Payroll Mgt Cost Recovery ATLA	0.00	772.56
71205 - Intl Consultants-Sht Term-Tech	0.00	11,017.60
71405 - Service Contracts-Individuals	0.00	34,862.23
71410 - MAIP Premium SC	0.00	154.27

Table 8. Realized co-funding

Co-financing (type/source)	UNDP own financing (mill. US\$)		Government (mill. US\$)		Partner Agency (mill. US\$)		Total (mill. US\$)	
	Planned	Actual	Planned	Actual	Planned	Actual	Actual	Actual
Grants	600,000	850,761 ⁵					600,000	850,761
Loans/Concessions								
• In-kind support			400,000	114,233			400,000	114,233
• Other								
Totals							1,000,000	964,994

⁵ As of 31 October 2015 UNDP expenditures were US\$ 850,761. UNDP budgeted for 2015 an amount of US\$ 217,000 which would give a total UNDP contribution of US\$ 1,105,940 when all will be spent at the end of 2015.

3.2.2 Partnership arrangements

50. The SLM project used existing government structures for the management and implementation of the project activities as per prevailing government policies limiting use of PMUs in project management. The policy came about in order to build capacity and continuity within government departments. The SLM project established partnerships at national and district levels with government departments with EAD as the project lead department. Government agencies included Departments of Land Resources Conservation, Forestry, Fisheries, Energy and Climate Change and Meteorological Services. Further the project utilized decentralized governance structures at district and local levels. Thus the project worked closely with Area Development Committees at Traditional Authority Level and Village Development Committees at Group Village Levels. Working with existing government and local structures enhances the sustainability of the project after the project comes to an end.
51. The organisation of the project was characterized by the involvement of multiple sectors, governmental, non-governmental and private in SLM. The EAD played a central role in this successful collaborative and integrated effort, and it played this role satisfactory. Also at district level, collaboration between the different project partners was smooth and respectful.
52. Contrary to the conclusions of the MTR consultant, the TE consultants have the opinion that the PMU is well-placed in Lilongwe. Collaboration among the various stakeholders at district level is already good and does not need to be enforced at that level. In Lilongwe the PMU plays a very important role for the liaison with UNDP and the various sector departments playing an important role in the project. And, above all, the policy planned contributions of the project require close contact with high level policymakers in Ministries. The position in Lilongwe facilitates also coordination and knowledge sharing with other donors and projects. Communication between PMU and district was good.
53. While day-to-day project management was usually well taken care of (particularly through the dynamic operation of the project manager), at strategic level the project leadership was struggling to deal with the shortcomings in project design and operational setup, particularly in relation to the imbalance ambitions/resources, project monitoring and administrative constraints as highlighted issues constraining this evaluation.
54. To provide specific technical assistance to the partners, consultants were contracted to deliver key knowledge and policy reports on sustainable charcoal, crop insurance and green water credits.
55. In the last year of the project, NGOs were engaged to scale up implementation of SLM activities (DAPP, NACOHUSO, WESM, COPRED) at the local level and to engage key stakeholders on green water credit scheme (CURE). With the implication of NGOs, government district staff were still involved in the implementation of field activities providing technical expertise to the NGO's SLM activities. While there was sharing of information and reports between NGOs and government agencies at district level in three out of four districts, one district in particular (Blantyre) complained that the engaged NGOs were not sharing reports submitted to project PMU. Sharing of reports in such a multi-stakeholder project enhances lessons learning and sharing of field experiences.
56. Regular fund flow appeared to be one of the main constraints of the progress for the project. Both UNDP and district officers stated that lack of experience with UNDP procedures of government project staff (financial and other) resulted regularly in non-compliance of reports and delays in

funding. The project document did in anticipation to this problem propose to include additional administrative support staff for the PMU. This was however rejected by the government following its policy to take full care of administrative matters by government staff in order to increase ownership and sustainability in terms of capacity improvement. Obviously there is a conflict here between two opposite but both justifiable objectives. A solution should have been found to enforce administrative management within the contours of the government policy.

3.2.3 UNDP and Implementing Partner implementation

RATING	3: MODERATELY UNSATISFACTORY⁶
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57. Quarterly work plans, funding requests, financial reports and progress reports were prepared by implementing partners at district level and sent through the district desk officers in the districts to the PMU. Desk Offices were delegated in Neno, Mwanza, Balaka and Blantyre to respectively Fisheries Department, Forestry Department, Forestry Department and EAD. Consolidation of quarterly planning and reporting was done by the PMU. Annual workplans were reviewed and approved by the project Steering Committee.
58. In 2011, 2012 and 2013 district received payments directly from UNDP, while in 2014 and 2015 payments to districts passed through the EAD. Necessary approvals were done by PMU, EAD and UNDP.
59. NGOs were contracted directly by UNDP and reporting was done directly to UNDP with a copy to the District desk officer and funding was directly from UNDP to the NGOs.
60. Government and NGO field officers frequently complained about late and erratic disbursement of funds from PMU to the partners, which affected timing and execution of activities. Field evidence supports the fact that timing of activities was affected by late and erratic flow of funds from PMU to partners. According to the PMU, their requests to UNDP were usually on time and included a workplan and PMU generally released funds to districts as soon as they were received from UNDP. In the early years of the project, delays could be attributed to the slow reconciliation of funds due to accounting capacity constraints at the district government offices but this improved once district accounting staff was trained by the project on reconciliations. Disbursement from GEF secretariat to UNDP appears not to have been delayed, therefore the funding bottlenecks seem to be found in the chain from the UNDP Country Office through EAD, PMU and districts to the field. This issue is further discussed in section 3.3.3, page 39.

⁶ This relatively negative rating is mainly based on the funding issues which remained unsolved and impacted the project's progress significantly. It deserves a low scoring. However, "moderately" is included in the rating as the inadequate management of the financial issues has been largely compensated by good collaboration by partners at technical and implementation levels.

3.2.4 Monitoring and evaluation: design at entry and implementation

RATING	4: MODERATELY SATISFACTORY
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61. The following monitoring and evaluation processes were applied in the project:
- Monthly financial reports
 - Quarterly financial and technical reports with budget draw down requests
 - Project Steering Committee meetings to approve work plans
 - Annual Project Progress Reports (APR)
 - Annual financial reports
 - Annual financial audits
 - Tri-partite Review Meetings (EAD, UNDP, GEF regional co-coordinator, key stakeholders)
 - IP Reports
62. An Inception Workshop was organized at the beginning of the project to provide among others a detailed overview of reporting, monitoring and evaluation requirements and to agree on a Monitoring and Evaluation work plan and budget. However, the Inception Report does not include a section on M&E.
63. Later a monitoring matrix was developed under the project but this matrix has an unknown status. The implementation arrangements in this matrix state "The Project Coordinator will oversee the hiring of specific studies and institutions, and delegate responsibilities to relevant team members (DOF, DLRC, and Water Department)". This task has however not resulted in structured monitoring routines and results.
64. Monitoring of field activities was effective. District staff turned out to be frequently supervising the field activities and the project manager as well as technical advisor also made frequent field visits. Back-to-office reports show also frequent visits of UNDP staff to the districts and field.
65. Despite their appreciation of the contributions of NGOs to field implementation, district officers complained that they were not well informed about the activities of NGOs. According to them NGO progress reports were not regularly shared with them. It is however unclear why this issue could not be solved at the level of the district teams of which the NGOs were part.
66. Planning and reporting was in some occasions impacted by erratic financial disbursements. This was particularly the case for the NGO contracts as NGOs had to interrupt their activities when waiting for delayed funding to cover activity costs.
67. Impact monitoring has not taken off fully. In the beginning of the project a monitoring matrix was prepared but a sound monitoring action plan as required according to the ProDoc has not been elaborated. The matrix contains impact indicators which are difficult to measure and hiring of experts to operationalize the measurement of these indicators as suggested in this matrix has not been done.
68. A Mid Term Review has been done at the end of 2013/beginning 2014. The MTR has so far not been approved by the UNDP Regional Office and report handed to the TE team for review had the characteristics of a draft version. In view of the multiple imperfections of the MTR report, this document seems not to have reached the stage of a final version. However, the report contains a number of useful recommendations which have not all been addressed by the project after the MTR:

- need to measure/monitor soil fertility and erosion
- to address the reduced fund flow to the district activities
- improve mobility of extension workers (in the meantime addressed by a donation of motorcycles from COVAMS II)
- to develop and harmonize a policy to deal with river bank cultivation
- to formulate realistic output targets
- shifting from process to impact reporting
- the need to reinforce the PMU with administrative assistance

3.2.5 Adaptive management and feedback from M&E activities

69. Activity planning was based on quite consistent reporting and planning procedures starting at district level and ending with the Steering Committee meetings. The dependency of the efficiency of the planning cycle on the stakeholder's capacity to comply with funding procedures resulted however in a situation where set targets were rarely accomplished.
70. Steering Committee minutes reflect discussions on issues raised by reporting and monitoring. Decisions have been taken during these meetings to adapt the project strategy and work plans.
71. The project's targets are over-ambitious in relation to the resources planned (financial and capacity). This problem has also been highlighted during the MTR in early 2014 and some targets have been reduced. The MTR recommended for example to reduce the SLM targets of 600,000 ha at MTR and 1,000,000 ha at end of project level to a more realistic targets of respectively 70,000ha at Mid-Term and 100,000ha at end of project.
72. Good examples of adaptive management resulting in management decisions are:
- the decision to employ NGOs in the implementation of SLM covered by additional UNDP funding (MK 6,500,000) to boost progress in the field;
 - to adjust the results framework's targets after the MTR
 - to elaborate exit strategy measures;
 - identification of project hotspots to focus interventions;
 - decisions on project extensions.

3.3 Project Results

RATING	5: SATISFACTORY
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3.3.1 Relevance

RATING	6: HIGHLY SATISFACTORY
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Needs of intended beneficiaries

73. The SLM project activities were relevant to the needs of the intended beneficiaries and did address community's needs. Project beneficiaries in the four operational districts have the following major needs: (1) to generate household income (2) to produce sufficient and nutritious food amidst declining soil fertility and climate change; and (3) have easy access to wood energy (principally wood fuel). In an attempt to meet livelihood challenges, some communities have engaged in unsustainable land use activities such as charcoal production using unsustainable wood sources; cultivating near river banks, marginal and steep slopes; and causing forests fires.
74. The SLM project activities were aimed at stemming unsustainable charcoal production by promoting alternate IGAs (such as bee-keeping, fish farming, tree nurseries, fish ponds, value addition) in the short term and encouraging afforestation and natural regeneration along river banks, bare hills and homesteads in the long-term. Further, the project promoted conservation agriculture, manure making, gully reclamation, marker ridges and vetiver planting. In the long run, these SLM activities will increase soil fertility, reduce erosion and reclaim gullied areas while offering communities immediate short-term benefits in AIGAs. The SLM project achieved a good balance of short-term community benefits with long-term afforestation, nature regeneration and CA goals.

National policies and priorities

75. The SLM project strategy is consistent with national policies and priorities. The Malawi Growth and Development Strategy II mentions sustainable environmental management and food security as key areas of focus for Malawi. Food and nutrition security and arresting deforestation in Malawi are key policy goals. The SLM project is also in line with Sector Policies for Agriculture, Forestry, Environment, Fisheries and Land Policy. The SLM Policy work done by this project has contributed to the development of sustainable national charcoal strategy. The Green credit line has potential to contribute substantially to financial resources for the SLM activities once the key issues are worked out.
76. Approximately 90 % of Malawi's electricity generation depends on hydro power from Shire River and mayor towns such as Zomba, Mwanza and Blantyre depend on water from the SRB to supply drinking water to their populations. The demand for electricity is growing as a function of population growth and economic development (Figure 1, page 33). Land degradation is the key factor responsible for the decline of water resources due to erosion and siltation. Maintaining water provision for drinking water and power generation requires increasing costs to mitigate the consequences of land degradation (Figure 2, page 34). Therefore utility companies (ESCOM, SRWB,

BWB, LWB) are keen on this once modalities are worked out, which is shown by for example their increasing budgets for catchment protection. The efforts under the project by EAD and CURE to develop a model for PES are therefore an important first step and now the Government must take the lead and bring stakeholders together to collaborate on the development of this model and the necessary enabling policy environment.

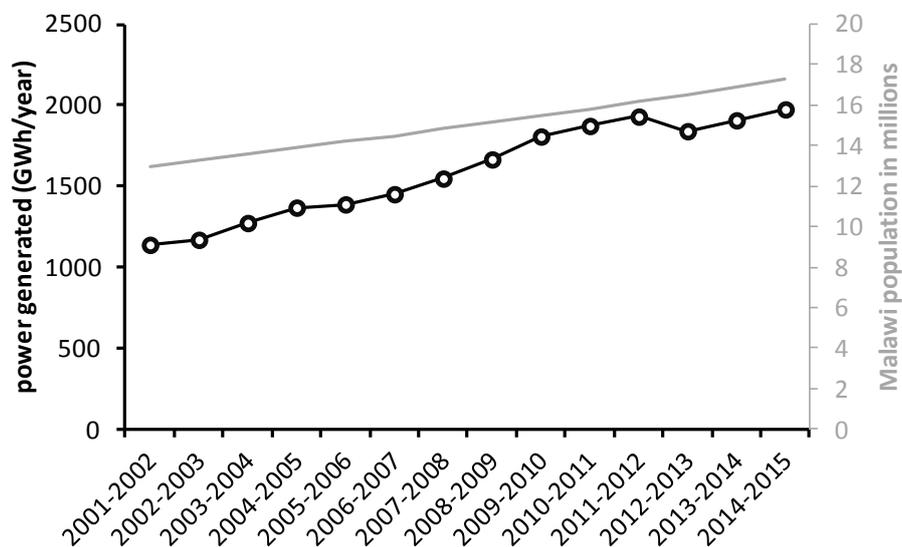


Figure 1. Growth of the hydro power production (in GWh/year) in the Shire to the background of the growth of the population of Malawi (in millions)

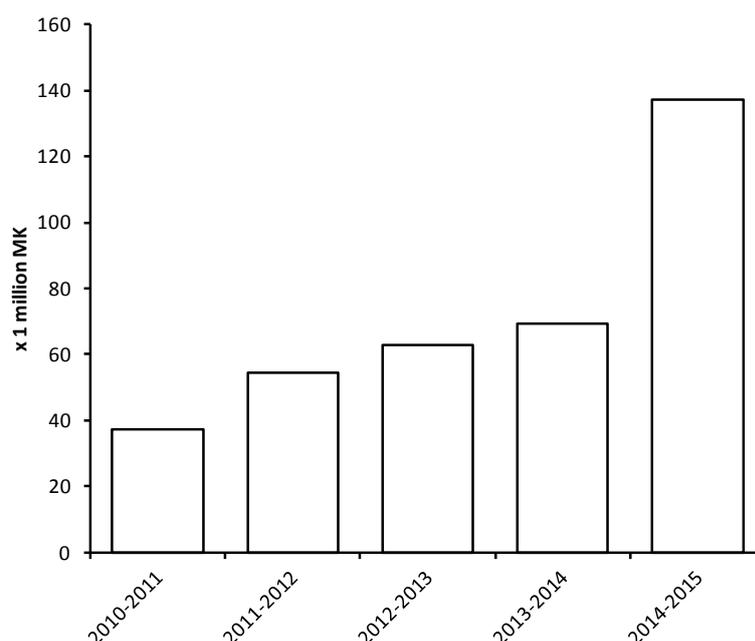


Figure 2. Increasing costs for the removal of silt and weeds to maintain the power generation capacity in the Shire river (source ESCOM)

International agreements and commitments

77. The project has been designed in consistency with the following international agreements. The following international agreements relevant in the context of the project and ratified by Malawi are:
- United Nations Convention on Combating Desertification, ratified in 1996
 - United Nations Framework Convention on Climate Change, ratified in 1994
 - United Nations Convention on Biological Diversity, ratified in 1994
78. After the Earth Summit in Rio de Janeiro, Brazil in 1992, Malawi launched its National Environmental Action Plan (NEAP) in 1994. This is Malawi's operational tool for the implementation of Agenda 21, identifies and highlights several environmental issues including: high soil erosion, low soil fertility, deforestation, overgrazing, over-fishing, loss of biodiversity, water resources degradation and depletion, human habitat degradation, air pollution, and climate change.
79. In 2006, the Government of Malawi formulated the National Adaptation Programmes of Action (NAPA) in the frame of the UNFCCC. Out of five priority actions highlighted in the action plan to improve adaptation to climate change one specifically targeted the Shire River Basin: (b) Restoring forests in the Upper, Middle and Lower Shire Valleys catchments to reduce siltation and the associated water flow problems. The following specific actions are included to achieve this result:
- Creating buffers along the Shire River, and other rivers, such as the Ruo, to reduce siltation and the transfer of chemicals and other pollutants in water ways,
 - Planting fast growing tree species in catchments, and

- Building capacity, especially training, of rural communities.

80. Under the SADC Revised Protocol on Shared Watercourses (2000), Malawi has the obligation to maintain in the SRB a proper balance between resource development for a higher standard of living for their people and conservation and enhancement of the environment to promote sustainable development (Article 3-4) and to protect and preserve the ecosystem of its water resources including the prevention of pollution (Article 4-2).

Donor priorities

81. The project has been formulated in the frame of the GEF Focal Area of Land Degradation which aims at arresting and reversing current global trends in land degradation, specifically desertification and deforestation and addresses all focal area objectives:

- LD-1: Agriculture and Rangeland Systems: Maintain or improve flow of agro-ecosystem services sustaining the livelihoods of local communities;
- LD-2: Forest Landscapes: Generate sustainable flows of forest ecosystem services in drylands, including sustaining livelihoods of forest dependant people;
- LD-3: Integrated Landscapes: Reduce pressures on natural resources from competing land uses in the wider landscape;
- LD-4: Adaptive Management and Learning: Increase capacity to apply adaptive management tools in SLM/SFM/INRM.

82. The project has also been designed consistently with the UN development strategy for Malawi (UNDAF) within the development theme "*National Policies, local and national institutions effectively support equitable and sustainable economic growth and food security by 2016*" with the expected UNDAF Outcome "*Targeted population in selected districts benefit from effective management of environment, natural resources, climate change and disaster risk by 2016*". The expected UNDAF Outputs are:

- Environment, natural resources, climate change, and disaster risk management mainstreamed in policies, development plans and programmes at national level and implemented in 14 disaster-prone districts;
- Data and knowledge on the impact of climate change, environmental and natural resources degradation and natural disaster collected and made accessible to decision makers in Government, Private Sector and Civil Society;
- Coordination mechanisms and implementation arrangements for CC, ENR and DRR established and used at national level and in disaster-prone districts.

83. The mainstreaming of the UNDP priorities poverty, governance, gender, resilience in the project has been assessed in section 3.3.5, (page 43).

3.3.2 Effectiveness

RATING	5: SATISFACTORY
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Outcome 1- policy, regulatory and institutional support for SLM

RATING	4: MODERATELY SATISFACTORY
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84. The project contributed considerably to the review and development of policies supporting SLM, particularly on forestry, charcoal, agricultural policy and energy. One of the outputs is a report on policy sector review for incorporating sustainable land management in the Shire River Basin and development of an institutional framework for sustainable land management. The review gives a good overview of the institutional, policy and legal setting of land management in Malawi and presents recommendations in that context. The document highlights EIA and environmental audits as important tools for project level environmental management. Unfortunately the document lacks the presentation of Strategic Environmental Assessment (SEA⁷) as the most effective tool for the development of policies in a multi-sector context such as the case for SLM.
85. A major output planned under this outcome was the development of the Shire River Basin Authority. This target has not been achieved and it was obviously too ambitious. The development of the institutional setup for the Shire River Basin is now taken care of by the SRBMP funded by World Bank.
86. Sustainable charcoal rules and regulations have been developed and the first charcoal licence has been given to Citrifine of Mwandama Plantation Ltd. The National Charcoal strategy is advancing, but not yet at the stage where the anticipated taxes to Malawi Revenue Authority are to be realized. Due to delays in the development of the PES mechanisms (Outcome 2), neither Green Water Credits nor carbon credits have been contributing to funding of improved forest management.

Outcome 2 - Private Public Partnerships providing financial incentives for SLM

RATING	4: MODERATELY SATISFACTORY
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87. A feasibility study by consultants on the potential for a Green Water Credit system in Malawi was completed in 2013 with 5 possible pilot areas identified for implementation and includes a business plan. The NGO CURE has been recruited to pilot the PES scheme in two communities at Ntasa village 1 and 2 in Mwanza and at Kalembo in Balaka. CURE identified and motivated buyers and downstream communities willing to participate and subsequently register for participation. CURE is also in the process of drawing up a list of indicators to measure the improvements of catchments in terms of quality and quantity. Community awareness and readiness meetings to sell GWCs have been conducted in Balaka and Mwanza districts. Two pilot sites were selected in Balaka and in Mwanza to test the establishment of GWC. It has been proposed that CURE would play the

⁷ see OECD 2006

intermediary role between the sellers and the buyers. A total of 42,240ha would be covered under the GWC pilot in these pilot areas.

88. The quality of the GWC consultancy report is good. However, the overall progress has been much slower than planned. The study was completed in August 2013, but CURE started its activities in December 2014. The main cause of this time gap is the time it took to formulate ToRs for the buying and selling parties in the GWC process. It seems that it would have been far more efficient to have the work of the consultants overlap. Another constraint for the work of CURE was the delays of activity funding. The result is that at the end of the project a GWC pilot is not yet operational. The fact that several buyers are interested to cooperate in GWC piloting appears to show that opportunities have been missed. The BWB indicated that they are now ready to spend MK 1 million per year on catchment protection in such an initiative.
89. The project did not manage to achieve generating additional income for communities and taxes to the government from sustainable charcoal. The major cause for not realizing the project targets in time in this regard was the reluctance of the government to accept sustainable charcoal as a legal and taxable good. However, three efficient kilns (Cassamance, Half Orange and Adams Retort) have been introduced and tested in Chikangawa Forest with a private company Kawandama Hills Ltd which has been licensed to produce sustainable charcoal from Eucalyptus wood of a 15000 ha plantation. A second test is due and additional test kilns have been constructed for that purpose in the community forestry areas in Neno and Mwanza districts. This is however awaiting government's approval and an announcement of the trials in a Press Release. Potential governance structures have been developed and potential packaging has been identified. Eleven charcoal producer associations have been formed in Mwanza, Balaka and Neno which are the major charcoal producing areas. They have been provided with training in sustainable charcoal production, cooperative management, alternative livelihood activities and business management skills. Procedures have been developed, including rules and regulations which guide operations of their activities and organisation.
90. The sustainable charcoal development suffered also from delays. A good consultancy report was produced in 2013 covering extensive recommendations for value chain management, sustainability and piloting. However, agreement on a sustainable wood source in the project area could not be reached. It seems that the focus of the project was too much on the efficiency of the kilns, which perhaps distracted the urgent need to develop the other aspects of the value chain in a pilot as a show case to promote the practice. Lack of guidance and leadership from the project's technical advisor can be considered as among the main causes of this strategic shortcoming.
91. A very significant result of this exercise however, is the change of mindset achieved in many policy makers and decision takers who were still clinging to the dogma of a complete ban on charcoal as an effective solution to deforestation, without realizing that this is a counterproductive approach towards the development of sustainable resource management.

Outcome 3 - Crop insurance and up to date weather information

RATING	3: UNSATISFACTORY
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92. A draft study on crop insurance was only completed in May 2015. The study report is good but progress on this project component stalled likely due to (1) late start of the consultancy, (2) limited synergy between the international and national consultant, and (3) lack of champion expected from the technical advisor. The report needs to be reviewed by the project and subsequently by the insurance companies interested in participation. Because of the delay, the crop insurance is not operationalized as the project ends in December 2015.
93. Few critical details are yet to be worked out: (1) agreeable insurance product from the insurance industry (2) identified target audience for the insurance product; (3) trigger indicators for payout and the cost of obtaining the data. There are lessons to be learned from past crop insurance schemes by World Bank and the hailstorm insurance of the Tobacco Industry in Malawi.
94. An automatic Weather Station purchased by the project and which was installed in Neno according to various project sources (persons and reports), was reported not to be functional after it had been purchased due to configuration issues of the firmware (see also section 3.3.3, page 39). However, when the evaluation team wanted to inspect the station in Neno, the station turned out not to be there. Apart from the local field staff at Neno, nobody seemed to be aware of the fact that the station had not been installed in Neno⁸.

Outcome 4 - Knowledge and skills sharing

RATING	6: HIGHLY SATISFACTORY ⁹
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95. According to the 2015 PIR, at least 77% of the beneficiaries are currently adopting 3 practices in the SLM impact areas. This figure is difficult to verify, but it is most probably correct, taking into account the wide coverage of the joint efforts of the different current SLM initiatives (GEF/UNDP, JICA, World Bank, DFID and USAID). Increased ground cover from grasses and trees with effective bushfire control and natural regeneration as well as SLM practices contributed to a reduction of soil erosion by over 40%. Consequently soil fertility increased in 150,000 ha of land covered by the project. Results from soil loss studies have shown that the amount of Nitrogen, P and K per hectare has increased significantly.
96. The project beneficiaries are expected to have obtained higher crop yield in the impact areas as a direct result of soil improvement. Introduced climate resilient farming systems contributed to this result also, particularly through the adoption of Conservation Agriculture in Balaka and Blantyre

⁸ This issue was further investigated by UNDP after the evaluation mission. It turned out that only the site for the station had been prepared at Neno in March 2015. The software issues were solved after the Terminal Evaluation and the station was installed at Neno on 14 February 2016. UNDP confirmed the presence of the Weather Station during a field visit from 13 to 18 March 2016. MET Department is now working on the data reception connection with its server.

⁹ This outcome has scored "Highly satisfactory" notwithstanding the fact that the initial targets have not been achieved. Since the readjustment of the target after the MTR implementation has accelerated significantly, and impressive, despite the funding constraints.

districts (approximately 250 hectares under CA). However, no baseline is available to quantify SLM's contributions to improved performance on crops

97. More than 70% of land users (particularly women and leading farmers) and over 80% of the technical officers have improved their SLM skills through training by the SLM project and COVAMS II, SRBMP and MCI. Furthermore, the project has provided training of district staff (75%) on Land Use Planning and Participatory Forestry Management. Information on SLM approaches and practices has been packaged for use by the extension staff. The following are available: (1) SLM Up-scaling approach, (2) Livelihood Approach to SLM, (3) Innovative approaches to SLM and (4) Governance Approaches to SLM. The following lessons and best practices have been generated and documented:
- Bushfire Control: An entry point to Sustainable Land Management;
 - Soil and Water Conservation at Micro-Catchment Level;
 - Livelihood Approach to Sustainable Land Management;
 - Natural Forest Regeneration: Setting the example for forest recovery;
 - Green Charcoal in Malawi: The Charcoal We Want;
 - Green Water Credit (PES): being paid for what we deserve.
98. Most of the SLM practices promoted were not new to field officers. The approach of the project was mainly to extend and upscale current SLM practices in order to cover ultimately the entire basin. On urban forestry no progress has been made, but co-management was successfully introduced and implemented in two forest reserves (Thambani FR, Mulindi FR).

3.3.3 Efficiency

RATING	5: SATISFACTORY
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Means and costs in relation to results

99. Obviously the project is under-budgeted in relation to objectives, which resulted in: (a) smaller areas covered by SLM as envisaged; (b) reduced visibility due to limited communication resulting in reduced replication and delayed decision taking; and (c) poor monitoring of outcomes and impacts hampering adaptive management. However, it is doubtful that the managerial capacity of the project in the form in which it has been established could have handled a larger budget. In other words, not only funds were a factor limiting performance, but also management capacity as fund flow was partly a consequence of insufficient capacity. The lack of an explicit communication strategy contributed to shortcomings at the level of visibility, which is issue (b) highlighted above.
100. Erratic and ill-timed fund flow of project activities considerably hampered the performance of the project. The following causes have been mentioned to contribute to this problem:
- (1) the fact that UNDP procedures do not allow to release funds when expenditures of the previous funding period have not been properly reported¹⁰;

¹⁰ Due to the duration of the period required for reporting, approval and release of funds, activities were interrupted as no financial buffer is available to cover these periods

- (2) lack of experience of administrative staff capacity at district level to deal adequately with UNDP financial and administrative procedures leading to delays in approval of reports;
- (3) stagnation of fund flow at the level of UNDP and EAD.

101. Stagnation of funds at the level of UNDP has been mentioned by interviewed stakeholders most often as a cause of implementation delay. An analysis of the UNDP disbursements shows that most disbursements were done in the second part of the year, mainly shortly before the onset of the rains which is the key period for SLM activities (Figure 3, page 41; and Appendix 13, page 95). This indicates that also stagnation of fund flow between EAD and the field contributed to delayed availability of funds.
102. An important factor delaying funding at UNDP-CO level was lack of compliance of financial reports from the implementing partner. As explained earlier, financial reporting had to be done by government staff. Administrative staff was trained but obviously not sufficiently and high turnover of administrative staff undermined training efforts. UNDP-CO disbursements were done based on the principle of 80% reported liquidation. However, financial reports had to be sent back regularly due to insufficient specification of expenditures.
103. Delays in disbursement of funds resulted in the delays in implementation of project activities. This resulted in seasonal activities related to forestry and agriculture, such as land preparation and planting, not being implemented during the appropriate season. In such cases actually a period of a full year had been lost.
104. Field implementation suffered from these issues, but at the same time district, NGO and field staff tried to find practical solutions such as "buffer funding" from other sources where possible. Generally the implementation of field activities appeared to be very cost effective.
105. The project supported the purchase of an automatic Weather Station for a total of MK 7,333,527.00 (US\$ 12,751.03) on 30 December 2013 to cover a "blind area" in the SRB of the current weather monitoring network of the Department of Climate Change and Meteorological Services. According to this Department, the station had been installed in March 2015 in Neno. This Department reported also that the station could not yet (12/11/2015) be used because it requires to be configured for the network and technical expertise for configuration is not available in Malawi. The configuration is supposed to be done by an Austrian company. However, when the evaluation team arrived in Neno it turned out that the weather station has never arrived there. Only a fence has been constructed around the location planned for the station¹¹.

¹¹ This issue was further investigated by UNDP after the evaluation mission. It turned out that only the site for the station had been prepared at Neno in March 2015. The software issues were solved after the Terminal Evaluation and the station was installed at Neno on 14 February 2016. A UNDP-team confirmed the presence of the Weather Station during a field visit from 13 to 18 March 2016. In April 2016 the MET Department was working on the data reception connection with its server.

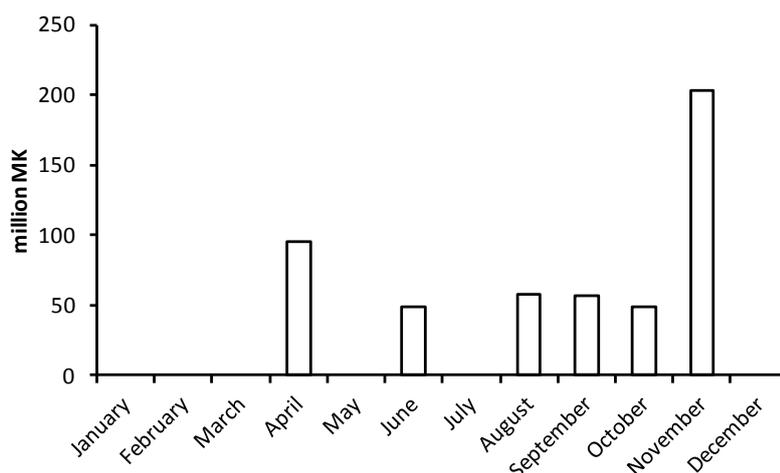


Figure 3. Summed disbursements from UNDP to EAD and districts aggregated per calendar month for the entire project period (2011-2015) as June 2015

Technical assistance

106. The SLM project engaged a Technical Advisor for the project and several consultants to work on Crop Insurance, sustainable charcoal and Green Water Credit Scheme. Evidence on the ground indicates the studies were done and good reports written especially on Crop Insurance and Green Water Credits even though some studies were not done on time. The studies did make specific policy recommendations to be operationalized and deliberated at a higher level. Our assessment is that the SLM project lacked a “champion” to move the recommendations forward at a higher level. The Technical Advisor should have spent more time pushing these policy recommendations higher up instead of spending a lot of time in the field attending to local operational issues. According to field staff he was an excellent extension worker, but he was not taking up his role as a coach of local technical assistants or as a policy advisor.
107. The development and implementation of policy recommendations on Crop Insurance, Green Water Credit and even Sustainable Charcoal required more support from the Technical Advisor and political support. The Project Coordinator (PC) could have guided the Technical Advisor on priority issues as highlighted above. More should have been done to push the policy agenda forward and ensure that required studies were done on time.
108. Several NGOs were engaged in the last year of the project to provide technical assistance in community mobilization, training and actual implementation of activities. These include COPRED, DAPP, NACOHUSA and WESM. These NGOs provided the last minute push to implement and scale-up project activities after the mid-term evaluation. These NGOs were engaged under a micro-grant arrangement between the project and the NGOs. These NGOs made all the difference and ideally should have been engaged at the very start of the project. Achievements could have been more given the synergies between NGOs and government staff on the ground.
109. Another NGO (CURE) played a pivotal role in coordinating green water credits and linking communities (as sellers of PES) and private sector entities as potential buyers of PES.

Intervention methods

(a) SLM interventions

110. Soil, water and forestry interventions are appropriate and easily taken up by farmers and other actors. It appears also that there is a strong collaboration among the different projects and extension services (EPAs) in the field. Most of the SLM practices applied are not new and innovative, but this aspect helps adoption by the farmers and swift extension over the project area.
111. It deserves mention that an interesting and promising shift has taken place with regard to forest rehabilitation by applying more natural regeneration in order to cover the large areas. Natural regeneration is more cost effective and its contributions to erosion prevention, ecosystem restoration and biodiversity are significantly better than planting trees, which is still the conventional approach, applied by many foresters and promoted by donors.

(b) Sustainable charcoal

112. The promotion of sustainable charcoal involved awareness raising among policy makers, mobilizing charcoal makers, experiments with different kilns and a consultancy feasibility study. The quality of the study and experiments was good, but progress was poor partly due to political resistance. However, a more strategic approach could have been applied with a strong emphasis on the operationalization of at least one pilot in the project area, based on sustainable charcoal production by a community or by the private sector.

(c) Green Water Credits

113. Technically the Green Water Credits component has been worked out well, but progress was limited and opportunities have been missed. This activity required permanent leadership during the entire project period to carry it forward. The NGO involved during the last year of the project could have played that role in combination with more (local) consultancy input.

(d) Crop Insurance

114. The crop insurance study carried out by the project appears technically good, but its operationalization is still far away. The technical understanding needed to be convinced of the approach may complicate acceptance by insurance companies as well as farmers. Furthermore, the benefits of insuring crops may be difficult to understand and adopt by smallholders anyway. Carrying out this activity was beyond the capacity of the project.

Communication

115. Both internal and external communication deserved more attention in this project. Other projects and organizations visited by the evaluation team were aware of the SLM project and its objectives. However, little was known regarding the results and lessons learnt so far, and there were few occasions where they could have learned more about the achievements of the project. This gave the impression that the visibility of the project was poor.
116. A communication plan was neither included in the project document nor in the inception report, while an elaborate communication plan would have been evident for a project with an important

ambition with regard to policy development as well as the upscaling of field practices. A good and useful report on lessons learned is being prepared but this has not yet reached the stakeholders.

117. Among the project stakeholders, there was a significant desire for more information exchange, particularly between district government partners and NGOs.
118. On the positive side, and also with regard to internal communication, it can be reported that the communication between PMU and UNDP appeared to be very smooth, and district officers as well as NGOs and other projects indicated that the PMU was very accessible.

3.3.4 Country ownership

119. The SLM project was owned by government at national, district and local levels. At national level, GOM seconded a Project Coordinator to the project and provided in-kind support to the project through provision of office space, utilities and staff. There was a functional Steering Committee at the national level for policy and operational guidance. At district level, several sector departments were involved in the SLM project (Land Resources and Conservation, Environment, Forestry, Fisheries). At EPA level, field extension workers (AEDO) were involved in implementing SLM activities. Despite the multi-sectoral involvement of several departments, areas of friction and policy disagreements were minimal. This is commendable and a plus for this project. Traditional leaders (TAs, GVHs and VHS and NRM and other village development committees received the SLM project well and devoted time and resources to the attainment of the project results). The SLM project is a good example of inter-departmental collaboration at the district level.

3.3.5 Mainstreaming of UNDP development priorities

Poverty alleviation

120. The project mainstreamed poverty alleviation issues in its design and implementation. The need for alternative income to charcoal selling was addressed through AIGAs such as bee-keeping (Balaka, Neno), cassava cultivation promotion (Blantyre, Neno), tree nurseries and value addition through production of groundnut oil and powder (Kunthembwe, Blantyre). Bee-keeping showed the greatest potential to raise household incomes and easily scalable across districts. Evidence on the ground indicates that farmers can generate good income from honey but marketing arrangements need to be improved. The private sector or cooperatives can play a role in honey aggregation, value addition and marketing.
121. Value addition activities through production of groundnut oil and powder were hampered by unavailability of ESCOM grid power at the village factory. While OVOP provided the machinery and the factory warehouse, grid power was not considered by OVOP. SLM project assisted farmers by providing resources to buy raw materials for manual groundnut powder production but it is doubtful that the activity can easily be scaled up given the higher capital requirements for equipment, warehouse and grid power. The cassava cuttings activity is scalable and does offer a means for the whole community to get cassava cuttings under a household cassava cuttings pass-on scheme. Cassava is a drought resistant crop and thus offering communities a means to build resilience to drought instead of relying on charcoal production.

122. Farmer managed tree nurseries offer a means to generate income for households and is scalable with minimum provision of inputs (tubes, some equipment). A policy that encourages development projects to buy tree seedlings from farmers within the area would offer farmers a ready market outlet and should be encouraged. SLM project did buy seedlings from local farmers.

Governance

123. The project had a significant contribution to governance through an extensive review of the policy framework on natural resources management. This review resulted in important contributions to new policies on forestry, charcoal, agricultural policy and energy as well as related legislation. Natural resources governance was also enhanced by the development of bylaws at community and district level in the field of SLM and bush fire management.
124. A significant achievement of the project in terms of improved governance was the multi-sectoral approach used. The project provided a collaborative framework for different sector departments (environment, forestry, energy, agriculture, and water), NGOs and the private sector to tune policies and practices resulting in synergy. A better shared vision on sustainable charcoal in the context of energy needs and drivers of deforestation is the result of this process and a good example of such synergy. While in the past charcoal was considered as a principal energy source for households by the Department of Energy Affairs, but as a threat to forests by the Forestry Department, under SLM project both departments have worked jointly on a policy for sustainable charcoal recognizing the present importance of charcoal for households and the need for a long term strategy to reduce the impact of charcoal production on forests.
125. Capacity building of government agencies and local authorities in all the project's different fields of intervention also forms a significant contribution of the project to enhanced governance.

Resilience

126. The prevention and recovery from natural disasters is an inherent aspect of the project strategy. This is achieved through interventions at three levels:
- Land use management adaptation by afforestation, riverbank protection, natural regeneration, and other SLM measures to improve resilience to erosion, drought and flooding;
 - Agricultural system adaptation by the introduction of drought resistant crops (cassava, pigeon pea, sweet potato) and agroforestry;
 - Financial mechanisms and measures such as Alternative Income Generating Activities (AIGA), Crop Insurance, and PES such as GWC.

Gender

127. Locally at implementation level, SLM project activities attracted the participation of men, women and some youth. More women (about 60%) than men (about 40%) were involved in SLM activities across the four districts even with bee-keeping. However, there was an exception. In charcoal production, more men than women were involved. The reason why more women than men were involved in project activities was that men are busy with other income generating activities for the family such as casual labour, small businesses and paid employment. Despite the fact that more women than men were involved in SLM activities, women across the four districts did not feel the

SLM project activities over-burdened them in light of their other domestic work. In fact, women expressed happiness in participating in the activities and wanted to do more. This is partly due to the seasonal and intermittent nature of SLM activities.

3.3.6 Sustainability

RATING	6: SATISFACTORY
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128. Sustainability has been assessed using 9 sustainability criteria (Table 9, page 45). Based on the sustainability analysis presented, it may be concluded that the continuation of interventions initiated and promoted by the project is likely in relation to all criteria. However, the following issues threaten sustainability to a certain extent:

- Limited government funding and government field staff relying on additional project funds for operation;
- Transfers of government staff reduces capacities realized in intervention areas and concerned district offices;
- Inconsistency of guidelines for buffer zone width along rivers;
- Crop insurance system may be not accepted by Insurance companies and the farmers, particularly smallholders;
- Toxic herbicides used during the first year of Conservation-Agriculture threaten the environment (including beekeeping);
- Legal support measures for replication of sustainable charcoal and GWC are still to be endorsed.

Table 9. Factors enforcing and threatening sustainable continuation of interventions after the end of the project

Sustainability criteria	Enforcing	Threatening
Economic and financial sustainability	Interventions may benefit from continued support of existing and new NRM projects (e.g. PDRP, COVAMS II, MCA, SRBMP)	Current government funding is however limited and government field staff relies often on additional project funds for operation.
Developed manpower and skills	The capacity built of government staff and communities by the project assures the necessary skills required to continue SLM interventions at all levels	Transfers of government staff reduces capacities realized in intervention areas and concerned district offices
Institutional management capacity	As established government structures (sectoral district administration and extension services) are used for interventions from the start of the project, no transfer is required at the end	
Policy support measures	The project contributed significantly to the development of NRM frameworks for agriculture, forestry, charcoal, energy and land & water management	
Political embedding	SLM project has been designed in the frame of MGDS II and other current NRM and development policies	There is inconsistency of guidelines for buffer zone width along rivers

Sustainability criteria	Enforcing	Threatening
Socio-cultural embedding	The SLM project implements interventions through village structures and traditional authorities	
Appropriate technology	Field interventions are mainly based on current approaches and have been adopted by stakeholders	However it is not yet evident that a Crop Insurance system as proposed by the project will be adopted readily by the Insurance companies and the farmers, particularly smallholders
Environmental protection	Since the project is designed to contribute to sustainable management of natural resources, practically all interventions are environmentally sustainable	In several District herbicides are used during the first year of the so-called Conservation-Agriculture. The products used, Glyphosate (Roundup) ¹² and Acetochlor (Harness) ¹³ are highly toxic to humans and other organisms, and therefore Conservation-Agriculture applying these herbicides is not environmentally sustainable. Cypermythrin ¹⁴ used on fruit trees is highly toxic to bees and may therefore have adverse effect on the promotion of beekeeping!
Replication	Technically there are no barriers for replication of interventions promoted by the SLM project	<ul style="list-style-type: none"> Limited funding available from government budgets Legal frameworks to support replication (e.g. sustainable charcoal, GWC) are still to be endorsed

3.3.7 Impact

129. According to the project document, the overall project goal is: "*Sustainable Land Management provides the basis for economic development, food security and sustainable livelihoods while restoring the ecological integrity of the River shire Basin*". The (specific) project objective is: "*To reduce land degradation in the Shire River Basin through improved institutional, policy and PES arrangements.*" Therefore, indicators of project impact (overall

¹² On 20 March 2015, the International Agency for Research on Cancer (IARC) reclassified glyphosate as a chemical that probably causes cancer. The IARC is a branch of the World Health Organization that focuses on cancer, and it combines the knowledge and expertise of epidemiologists, laboratory scientists, and biostatisticians. In 2015, a ban on Glyphosate (Roundup) is being processed in various countries in Europe and South America.

¹³ Acetochlor (Harness) is used for control of most annual grasses and certain broadleaf weeds. It is considered a restricted use pesticide (RUP) with a toxicity classification of I (Highly toxic). Research indicated carcinogenic effects on various animals exposed to this herbicide. <http://pmep.cce.cornell.edu/profiles/extoxnet/24d-captan/acetochlor-ext.html>

¹⁴ Cypermethrin used to spray fruit trees, is not only highly toxic to bees, but also to fish and other aquatic organisms. For mammals, including humans, Pyrethroids may cause adverse effects on the central nervous system, liver and kidney (<http://pmep.cce.cornell.edu/profiles/extoxnet/carbaryl-diclotophos/cybermet-ext.html>)

objective level) need to cover (a) economic development, (b) food security and (c) sustainable livelihoods and (d) ecological integrity.

130. The project Monitoring and Evaluation Planning Matrix presents the following indicators:
- silt reduction in Blantyre and ESCOM water stations;
 - improvement of soil organic matter;
 - increased ground cover (trees and grass/herbs);
 - floristic and structural woodland recovery;
 - carbon reduction;
 - increase of household welfare by percentage increase of income and reduction of days of food insecurity
 - and other indicators to be determined during project inception.
131. Indicators at (specific) objective level are covered by outcomes (e) institutional arrangements, (f) policy development and (g) PES arrangements.
132. Indicator targets of impact included in the results framework of the project at the level of the project goal are:
- (1) Over 75% of the Shire River basin registering reduction in land degradation as measured by:
 - at least 50% reduction in silt in the ESCOM and Blantyre water stations,
 - at least 30% improvement in soil organic matter and structure,
 - increased ground cover (grasslands and woody vegetation) and other indices to be determined during the formulation of the M&E action plan (during inception period);
 - (2) At least 25% of woodlands showing recovery as measured by regeneration (recruitment) and improvements in species index;
 - (3) At least 1.5 million tons of carbon dioxide mitigated from sustainable charcoal in the districts and increased efficiency of burners and kilns;
 - (4) At least 45% improvement in household welfare for a minimum of 75% of the households in pilot districts, as measured by
 - percentage increase in household income,
 - percentage reduction in number of food insecure days,
 - other specific indicators to be determined during project inception.
133. Although the monitoring matrix has been prepared relatively early during the project, more or less systematic data collection started half way through the project. No monitoring implementation plan with SMART indicators has been prepared during the inception phase or thereafter.
134. Due to difficulties in measuring indicator values (not SMART) and the lack of an elaborate monitoring implementation plan, few data are available on the impact of the project and few data have been collected (Table 10, page 48). So far impact assessment was hardly based on impact measurement, but indicator values were estimated based on quantification of interventions as a proxy for impact.

135. Important opportunities missed in the development of impact monitoring implementation are among others bushfire monitoring using remote sensing¹⁵, remote sensing data on forest cover and catchment discharge data collection in collaboration with water users (BWB, SRWB, ESCOM).

Table 10. Status of measurement of impact indicators specified in the project's monitoring matrix

Indicator	2013	2015	Comments
Silt reduction in Blantyre and ESCOM water stations;	No data available	No data available	No structured data collection
Improvement of soil organic matter;	No data available	No data available	COVAMS started measuring fertility parameters recently
Increased ground cover (trees and grass/herbs);	FAO study indicates deforestation rates at 2 - 4%	SLM project estimates 50% reduction in SLM impact areas.	No forest cover monitoring, but impact estimated based on areas covered by interventions
Floristic and structural woodland recovery;	<ul style="list-style-type: none"> Rehabilitation: buffer zone of Nkasi (19km), Mpale (8km) 80 hectares under afforestation (Balaka 22ha, Neno 15ha, Mwanza 9ha and Blantyre 34ha) 9,485 hectares natural regeneration 	<ul style="list-style-type: none"> 40% increase in woody vegetation through up scaling SLM technologies 150,000ha through bushfire control, natural forest regeneration and afforestation 	Floristic and structural woodland composition has not been monitored but estimates based on areas covered by interventions
Carbon reduction;	10,718ha SLM coverage in 3 years: LULUCF contributed to estimated total of $0.5 \times 10718 \times 3 = 16,077$ tons, which is 5,359 tons/year reduction of CO ₂ emissions due to LULUCF	Based on 150000 ha SLM coverage (LULUCF) over 2 years contributed to estimated mitigation of $0.5 \times 150000 \times 2 = 150,000$ tons CO ₂ ¹⁶	Areas covered with LULUCF based on areas covered with interventions but outcome not measured in the field
Increase of household welfare by percentage increase of income and reduction of days of food insecurity	No data	45% of households have improved incomes from alternative livelihoods	Estimates based on number of households reached but no impact assessments carried out
Other indicators to be determined during project inception.			No other impact indicators have been determined and measured

¹⁵ MODIS Rapid Response System (NASA Goddard Space Flight Centre and the University of Maryland - <https://earthdata.nasa.gov/earth-observation-data/near-real-time/rapid-response>)

¹⁶The PIR 2015 calculates $0.5 \times 150000 \times 3 = 225,000$ tons CO₂. This is wrong as the period from the previous estimate (2013) has to be taken which is 2 years

4 Conclusions, Recommendations & Lessons

4.1 General conclusions

136. The reliability of water provision is crucial for households, for agriculture and for many economic sectors in Malawi. Water resources are at risk due to: (a) a growing demand for water; (b) unsustainable land and water use; and (c) due to climate change. The Private Public Sector Partnership for Sustainable Land Management (SLM) Project in the Shire River Basin addresses the threats to water provision of humans and ecosystems including related issues such as soil fertility, food security, energy and resilience to climate change. Therefore, the project is highly relevant not only in the context of the Shire River Basin, but for the entire country.
137. Important achievements of the project are among others:
- promotion of a multi-sector approach and partnerships in natural resources management;
 - promotion of integrated river basin management;
 - promotion of SLM at community and farm level;
 - promote innovative approaches on the policy agendas such as Green Water Credits, sustainable charcoal and weather information based crop insurance;
 - change of mind set with regard to sustainable charcoal;
 - provide important inputs in policy and legal frameworks;
 - reduction of environmental degradation in a number of pilot sites.
138. A number of factors have hampered the targets set in the project's result framework:
- very ambitious targets in relation to the resources planned;
 - strong dependency on unreliable co-funding;
 - insufficient administrative management capacity of the implementing partner;
 - insufficient additional support mechanisms/staff;
 - insufficient leadership in relation to the technical and policy ambitions of the project;
 - incapability to deal effectively with the financial and administrative challenges;
 - insufficient corrections after the MTR.

4.2 Corrective actions for design, implementation, monitoring and evaluation

139. Not much space exists for corrective actions in the current setup as this is a Terminal Evaluation and the project is to be finalized soon after the completion of this evaluation. However, listing recommended actions for improvement are useful in the context of the exit strategy and the formulation of follow up actions.
140. Planning of projects related to sustainable natural resources management needs to consider the duration required to achieve change in this field. NRM is a long term issue, which requires several donor project cycles as donor funding cycles (including those of GEF and UNDP) are usually relatively short (4-5 years). The current project objectives are far too ambitious in relation to the resources planned and either more funding should have been assured or the ambitions of the project should have been scaled down. The key innovative project components, Crop Insurance, GWC and

Sustainable Charcoal require higher level champions to push the agenda further through the different channels for policy development.

141. More focus would also be achieved by dropping the Crop Insurance component from the project strategy (and eventually bringing it into a separate project). The relevance of this component in the project strategy is less strong. Crop Insurance is relevant with regard to risk management of farmers but it is not addressing a barrier to sustainable NRM. Moreover, Crop Insurance for small holders is a relatively young approach, which still needs to prove its success in Africa. This is explained in the consultancy report of Makaudze and van den Bos (2015).
142. The efficiency in terms of resource utilization as well as in terms of learning would increase significantly while interventions would be targeting selected (micro) catchments. It would be possible to evaluate inputs and outcomes through SMART monitoring of the selected catchments, taking into account rainfall, catchment discharge, silt, pollution, crop yields and other environmental and socio-economic parameters. More visible and significant results would also help to "sell" the approach to other catchments and motivate other communities to adopt the practices. Additionally, an opportunity would be realized to test approaches in a well understood context.
143. Crucial for effective adaptive management and learning is the preparation and implementation of sound monitoring plan using SMART indicators, not only indicating what has been done (which is the case in the current monitoring matrix), but also what measured change has been achieved.
144. An important aim of the project is to motivate stakeholders and other actors varying from farmers to policymakers to deviate from their usual trail of thinking and acting. The efforts required to make that move have not been well articulated in the project strategy. A sound communication plan is needed for internal and external communication, specifying which changes are intended in specific target groups, while presenting elaborate communication approaches to address effectively messages to these specified target audiences.
145. The role of government agencies for extension of SLM practices is evident. The involvement of NGOs can be useful when their contribution has additional value to the implementation of field activities. Some NGOs have specific technical know-how (e.g. CURE has experience with PES) and may be helpful to introduce innovative approaches. Generally NGOs have more flexibility at administrative and operational levels, which can be helpful to boost field activities. NGOs do, however, not replace government agencies which have the formal mandate to promote and implement policy. To have NGOs and governmental agencies working complementarily, the best result would be achieved when NGOs are involved from the very start of project. Intensive sharing of information on operations of both contributes to effectiveness and efficiency.
146. Natural resources management has a strong seasonal character due to seasonality of weather and ecology. Funding requirements of NRM activities are therefore also very much dependent on the factors determining the seasons, particularly rainfall. If interventions (SLM, planting, extension, ...) cannot be implemented in anticipation of such seasonal events such as rains, serious loss of resources may be the result. Loss of a season due to late funding usually implicates the loss of an entire year.

4.3 Recommendations to follow up or reinforce initial benefits from the project

147. The immediate actions required to consolidate the achievements and successes of the project before the project's end will limit operational possibilities are the following:

(1) Finalizing, sharing and storing documents:

- All technical reports of the project, particularly the consultancy reports and best practices report need to have a finishing touch to achieve professional quality according to a checklist for consistent quality (Date on front page, Summary, Table of Contents, Reference list, etc.);
- All project documents (technical, managerial, financial) need to be stored systematically (consistent document names and file names showing contents);
- Circulation of relevant documents to partners;

(2) Organizing a workshop before the end of project with stakeholders and related projects with the following objectives:

- sharing knowledge and lessons-learned;
- identification and elaboration of opportunities for follow-up and upscaling of interventions through government programmes and other donor projects are to be developed during this workshop. Opportunities: DFID, SRBMP, COVAMS II, MCA and Perform. The development of a new EU project (Global Climate Change Alliance) in this sector forms a new opportunity.

(3) Finalizing incomplete activities:

- Resources need to be identified for the testing of charcoal kilns which have been constructed in the project area and the disseminating of the results;
- Resources need to be identified to finalize GWC indicators and to start a GWC pilot; if possible CURE continuing and extending its activities in this regard; private sector companies and utilities (ILLOVO, SWRB, BWB, ESCOM) are keen to step in.

148. The implementation of UNDP's Post Disaster Recovery Projects offers some opportunities to facilitate smooth completion and/or handing over of interventions.

4.4 Proposals for future directions underlining main objectives

149. In order to capitalize the results so far with regard to weather information based crop insurance, funding opportunities need to be identified for a crop insurance project as a separate stand-alone project and use lessons learnt of past efforts (Tobacco Industry, World Bank Crop Insurance Scheme). The question needs to be re-evaluated to what extent weather information based crop insurance can be used as an instrument in SLM.

150. The enhancement of an enabling environment for further development of practices for SLM requires the finalization of policy and legal frameworks for forestry, energy, agriculture and charcoal as already in order to continue the process initiated and maintained by the project

151. The formation of an institution for the sustainable management of water in the Shire River Basin as already been taken over by the World Bank funded Shire River Basin Management Project.

152. Apart from other good SLM practices, bee-keeping and natural tree regeneration deserve to be promoted for upscaling to other donor-funded and government projects as both have significant

additional benefits in terms of on the one hand ecosystem conservation and on the other hand food security and household income.

153. Since bushfire, besides unsustainable charcoal production is among the most important factors responsible for forest degradation, national bushfire control strategy is required to be developed. Such a strategy needs to involve all stakeholders (land users, law enforcement, extension workers, traditional authorities, government authorities, private sector, ...) and use experiences from other countries (e.g. Zimbabwe, Ghana, ...)
154. As currently cultivation on steep slopes is still widely practiced in Malawi, while it is provoking serious erosion and environmental degradation, an effective and enforced policy is required to stop this practice rigorously. A controlled approach to this end without losing benefits for communities from such areas is moving towards classifying all steep areas as protected areas under local co-management of natural resources.

4.5 Good and bad practices

155. Good practices to apply in similar projects and other interventions addressing SLM are the following:
- Adopting a multi-sector approach for the implementation of SLM interventions leads to synergy between the efforts of different sectors and limits the risk of conflicting objectives;
 - Concentrating interventions at catchment level improves synergy and facilitates learning and improving performance by measuring outcome;
 - Promoting natural forest regeneration is a cost effective approach to maximizing ecosystem benefits;
 - Using existing Malawian experience with PES applied in wildlife conservation for the development of Green Water Credit Schemes;
 - Promoting sustainable charcoal in order to counter the pressure on forest resources by engaging actors along the chain to gain control over the sector;
 - Promoting short-term economic gains like bee-keeping and fish farming while protecting forests in the long-run to balance short-term and long-term economic benefits to release pressure;
 - Development projects buying tree seedlings locally from the community to contribute income to the community and to avoid unfair competition;
 - Promoting low cost CA and Gully Reclamation techniques to control gully erosion and improve soil fertility.
156. Bad practices which application should be avoided in SLM project or related interventions are the following:
- Being over ambitious and desiring to achieve too many objectives during a limited time span while resources are insufficient to cover these;
 - Building ambitions of a project for a considerable part on uncertain co-funding contributions;
 - Underestimating the importance of the implementation of a sound communication strategy as integral part of the project strategy to enhance project visibility;
 - Underestimating the importance of SMART impact monitoring as the basis for adaptive result management;
 - Underestimating the crucial importance of efficient administrative management for the progress of project interventions;
 - Expecting movement on critical policy issues without a clear high-level champion;

- Using highly toxic pesticides in Conservation Agriculture which have adverse effects on humans and other organisms, including bees.

Appendices

Appendix 1. Terms of reference

Terms of Reference (TORs) for the Terminal Evaluation of the Private Public Partnership for Sustainable Land Management in the Shire River Basin

INTRODUCTION

In accordance with UNDP and GEF M&E policies and procedures, all full and medium-sized UNDP support GEF financed projects are required to undergo a terminal evaluation upon completion of implementation. These terms of reference (TOR) sets out the expectations for a Terminal Evaluation (TE) of the *Private Public Partnership for Sustainable Land Management in the Shire River Basin* (PIMS 2085).

The essentials of the project to be evaluated are as follows:

PROJECT SUMMARY TABLE

Project Title:	Private Public partnership for Sustainable Land Management in the Shire River Basin			
GEF Project ID:	PIMS 2085		<i>at endorsement</i> <i>(Million US\$)</i>	<i>at completion</i> <i>(Million US\$)</i>
UNDP Project ID:	00073331	GEF financing:	2,072,940.00	2,072,940
Country:	MALAWI	IA/EA own:		
Region:	AFRICA	Government:	400,000.00	400,000.00
Focal Area:	LAND DEGRADATION	Other:	600,000	600,000
FA Objectives, (OP/SP):		Total co-financing:	21,144, 940.00	21,300,000
Executing Agency:	Ministry of Natural Resources, Energy and Mines	Total Project Cost:	24, 216, 940.00	24,535,000
Other Partners involved:	District Councils	Pro-Doc Signature (date project began):		13 July 2010
		(Operational) Closing Date:	Proposed: 30 June 2014	Actual: 31 December 2015

OBJECTIVE AND SCOPE

The project was designed with overall goal of: “Sustainable Land Management” providing the basis for economic development, food security and sustainable livelihoods while restoring the ecological integrity of the River shire Basin”. The objective is: “To reduce land degradation in the Shire River Basin through improved institutional, policy and PES arrangements and improved food security

The Shire River basin covers over 3.1 million ha and directly or indirectly influences the livelihoods of over 5.5 million people in the southern region of Malawi. The basin is of critical economic importance: it is the source of over 98% of the country’s power generating capacity, supplies water

to major urban centres such as Blantyre and Limbe, supports a locally significant artisanal fishery, and supplies irrigation water for valuable crops.

The Terminal Evaluation will be conducted according to the guidance, rules and procedures established by UNDP and GEF as reflected in the UNDP Evaluation Guidance for GEF Financed Projects.

The objectives of the evaluation 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.

EVALUATION APPROACH AND METHOD

An overall approach and method¹⁷ for conducting project terminal evaluations of UNDP supported GEF financed projects has developed over time. The evaluator is expected to frame the evaluation effort using the criteria of **relevance, effectiveness, efficiency, sustainability, and impact**, as defined and explained in the UNDP Guidance for Conducting Terminal Evaluations of UNDP-supported, GEF-financed Projects. A set of questions covering each of these criteria have been drafted and are included with this TOR (*Annex D*). The evaluator is expected to amend, complete and submit this matrix as part of an evaluation inception report, and shall include it as an annex to the final report.

The evaluation must provide evidence-based information that is credible, reliable and useful. The evaluator is expected to follow a participatory and consultative approach ensuring close engagement with government counterparts, in particular the GEF operational focal point, UNDP Country Office, project team, UNDP GEF Technical Adviser based in the region and key stakeholders. The evaluator is expected to conduct a field mission to the department of environmental Affairs, including the following project sites *Balaka, Blantyre, Mwanza and Neno*. Interviews will be held with the following organizations and individuals at a minimum: Department of Water, Land Resources and Conservation Branch, Department of Energy Affairs, Department of Forestry, DAPP, CURE, NACUHUSO, COPRED.

The evaluator will review all relevant sources of information, such as the project document, project reports – including Annual APR/PIR, project budget revisions, midterm review, progress reports, GEF focal area tracking tools, project files, national strategic and legal documents, and any other materials that the evaluator considers useful for this evidence-based assessment. A list of documents that the project team will provide to the evaluator for review is included in Annex C of this Terms of Reference.

EVALUATION CRITERIA & RATINGS

An assessment of project performance will be carried out, based against expectations set out in the Project Logical Framework/Results Framework (see Annex B), which provides performance and impact indicators for project implementation along with their corresponding means of verification. The evaluation will at a minimum cover the criteria of: **relevance, effectiveness, efficiency, sustainability and impact**. Ratings must be provided on the following performance criteria. The

¹⁷ For additional information on methods, see the [Handbook on Planning, Monitoring and Evaluating for Development Results](#), Chapter 7, pg. 163

completed table must be included in the evaluation executive summary. The obligatory rating scales are included in Annex E.

Evaluation Ratings:			
1. Monitoring and Evaluation	Rating	2. IA& EA Execution	Rating
M&E design at entry		Quality of UNDP Implementation	
M&E Plan Implementation		Quality of Execution - Executing Agency	
Overall quality of M&E		Overall quality of Implementation / Execution	
3. Assessment of Outcomes	Rating	4. Sustainability	Rating
Relevance		Financial resources:	
Effectiveness		Socio-political:	
Efficiency		Institutional framework and governance:	
Overall Project Outcome Rating		Environmental :	
		Overall likelihood of sustainability:	

PROJECT FINANCE / CO-FINANCE

The Evaluation will assess the key financial aspects of the project, including the extent of co-financing planned and realized. Project cost and funding data will be required, including annual expenditures. Variances between planned and actual expenditures will need to be assessed and explained. Results from recent financial audits, as available, should be taken into consideration. The evaluator(s) will receive assistance from the Country Office (CO) and Project Team to obtain financial data in order to complete the co-financing table below, which will be included in the terminal evaluation report.

Co-financing (type/source)	UNDP own financing (mill. US\$)		Government (mill. US\$)		Partner Agency (mill. US\$)		Total (mill. US\$)	
	Planned	Actual	Planned	Actual	Planned	Actual	Actual	Actual
Grants								
Loans/Concessions								
• In-kind support								
• Other								
Totals								

MAINSTREAMING

UNDP supported GEF financed projects are key components in UNDP country programming, as well as regional and global programmes. The evaluation will assess the extent to which the project was successfully mainstreamed with other UNDP priorities, including poverty alleviation, improved governance, the prevention and recovery from natural disasters, and gender.

IMPACT

The evaluators will assess the extent to which the project is achieving impacts or progressing towards the achievement of impacts. Key findings that should be brought out in the evaluations include whether the project has demonstrated: a) verifiable improvements in ecological status, b) verifiable reductions in stress on ecological systems, and/or c) demonstrated progress towards these impact achievements.¹⁸

CONCLUSIONS, RECOMMENDATIONS & LESSONS

The evaluation report must include a chapter providing a set of **conclusions, recommendations and lessons**.

IMPLEMENTATION ARRANGEMENTS

The principal responsibility for managing this evaluation resides with the UNDP CO in Malawi. The UNDP CO will contract the evaluators and ensure the timely provision of per diems and travel arrangements within the country for the evaluation team. The Project Team will be responsible for liaising with the Evaluators team to set up stakeholder interviews, arrange field visits, coordinate with the Government etc.

EVALUATION TIMEFRAME

The total duration of the evaluation will be 25 working days according to the following plan:

Activity	Timing	Completion Date
Preparation	3 days	28 th September
Evaluation Mission	14 days	20 th October
Draft Evaluation Report	6 days	4 th November
Final Report	2 days	16 th November

ANNEX A. EVALUATION DELIVERABLES

The evaluation team is expected to deliver the following:

Deliverable	Content	Timing	Responsibilities
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¹⁸ A useful tool for gauging progress to impact is the Review of Outcomes to Impacts (ROTI) method developed by the GEF Evaluation Office: [ROTI Handbook 2009](#)

Inception Report	Evaluator provides clarifications on timing and method	No later than 2 weeks before the evaluation mission.	Evaluator submits to UNDP CO
Presentation	Initial Findings	End of evaluation mission	To project management, UNDP CO
Draft Final Report	Full report, (per annexed template) with annexes	Within 3 weeks of the evaluation mission	Sent to CO, reviewed by RTA, PCU, GEF OFPs
Final Report*	Revised report	Within 1 week of receiving UNDP comments on draft	Sent to CO for uploading to UNDP ERC.

*When submitting the final evaluation report, the evaluator is required also to provide an 'audit trail', detailing how all received comments have (and have not) been addressed in the final evaluation report.

TEAM COMPOSITION

The evaluation team will be composed of an international and a national evaluator. The consultants shall have prior experience in evaluating similar projects. Experience with GEF financed projects is an advantage. The international consultant will be the team leader and will be responsible for finalizing the report. The evaluators selected should not have participated in the project preparation and/or implementation and should not have conflict of interest with project related activities.

The Team members must present the following qualifications and experience:

- Minimum 10 years of relevant professional experience
- Knowledge of UNDP programming and GEF guidelines and procedures
- Previous experience with results-based monitoring and evaluation methodologies;
- Technical knowledge in the targeted focal area(s)
- Demonstrated experience and knowledge working on Sustainable Land Management policies, programmes and national plans.

EVALUATOR ETHICS

Evaluation consultants will be held to the highest ethical standards and are required to sign a Code of Conduct (Annex E) upon acceptance of the assignment. UNDP evaluations are conducted in accordance with the principles outlined in the [UNEG 'Ethical Guidelines for Evaluations'](#)

PAYMENT MODALITIES AND SPECIFICATIONS

%	Milestone
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20%	Upon submission of an acceptable Inception report.
30%	Following submission and approval of the 1ST draft terminal evaluation report
50%	Following submission and approval (UNDP-CO and UNDP RTA) of the final terminal evaluation report

APPLICATION PROCESS

Applicants are requested to apply online <http://jobs.undp.org>, by 31 July 2015. Individual consultants are invited to submit applications together with their CV for these positions. The application should contain a current and complete C.V. in English with indication of the e-mail and phone contact. Shortlisted candidates will be requested to submit a price offer indicating the total cost of the assignment (including daily fee, per diem and travel costs).

UNDP applies a fair and transparent selection process that will take into account the competencies/skills of the applicants as well as their financial proposals. Qualified women and members of social minorities are encouraged to apply.

ANNEX B. PROJECT LOGICAL FRAMEWORK

Project strategy	Objectively Verifiable Indicators				
	Indicator	Baseline	Target	Source verification	Risks/assumptions
Goal	"Sustainable Land Management" provides the basis for economic development, food security and sustainable livelihoods while restoring the ecological integrity of the SRB ecosystem.				
Objective: "To provide policy, institutional and financial enabling environment for the sustained adoption of SLM in the Shire River Basin"	Over 800,000 ha under direct SLM (project pilot area) and 1,000,000 ha impacted by up-scaling in next 4 yrs	Minimal land being managed in accordance with principles of SLM or integrated water and land management	at least 600,000 ha under direct SLM (project pilot area) by mid-term and at least 1,000,000 ha impacted by up-scaling by the end of the project	Project M&E reports, observations, Extension agents reports	Current high levels of support for SLM by communities, government and development partners declines
	Reduction in the rates of deforestation	Currently 6% per annum in the SRB	Rate of deforestation reduced by at least 50% by the end of the project	Department of forestry reports; project monitoring reports	Rent seekers might undermine project effort to reduce deforestation
	Improvement in the conditions of woodlands	Currently seriously degraded with many bare patches	At least 50% increase in woody vegetation in urban areas and currently degraded areas as measured through increased density of tree species, increased species index in re-vegetated/naturally recovering patches and improved population structure of selected forests/woodlands sampled	Department of forests reports; project monitoring reports	Rent seekers might undermine project effort to reduce deforestation
	Carbon mitigated from sustainable charcoaling	Currently no sustainable charcoaling – no carbon mitigated from it	At least half a million tons of carbon dioxide mitigated from sustainable charcoal in the districts by mid-term and a million cumulative at the end of the project	Reports of the charcoal associations on extent of adoption of sustainable charcoal	Voluntary markets dry up due to the global financial crises. This would reduce the incentive for sustainable charcoal; Prolonged drought interferes with establishment and growth of woodlots

Project strategy	Objectively Verifiable Indicators				
	Indicator	Baseline	Target	Source verification	Risks/assumptions
				augmented by records of carbon credits ready for sale and/or sold	
	Reduction in soil erosion	More than 85% of land experiencing serious forms of erosion	At least half of land under improved SLM registers at least 150% reduction in soil erosion by mid-term and 40% cumulative by end of project	Soil erosion monitoring reports as part of the participatory ecological monitoring;	Occurrence of El Nino or severe drought;
	Change in household wellbeing	More than 95% of households below the UN defined poverty line	At least 25% improvement in household welfare for a minimum of 75% of the households in pilot districts, as measured by percentage increase in household income, percentage reduction in number of food insecure days etc.	Socio-economic monitoring reports as part of the participatory monitoring system	Severe weather events such as drought or El Nino making SLM improved practices ineffective Inflation rising at higher than the current trends, would reduce net benefits; A return to political instability would reduce effectiveness of SLM

Project strategy	Objectively Verifiable Indicators				
	Indicator	Baseline	Target	Source verification	Risks/assumptions
The policy, regulatory and institutional arrangement support sustainable land management in the Shire River Basin	Number of functional institutions leading/participating in SLM in the SRB	No regional institution with the systemic capacity and mandate to coordinate integrated water and resource management in the SRB; local level environment management institutions present, but have weak capacities and are poorly coordinated	The River Shire Basin Authority established by the end of the 2nd year and has adequate governance mechanisms to allow participatory decision making, enough autonomy for effective operations, liquidity and a realistic financing strategy, and adequate capacity to effectively coordinate development that mainstreams SLM in the Basin; Charcoal associations established and have by-laws and capacity to organize sustainable charcoal production by the end of the first year; Malawi Earth Carbon Trust Fund' formed by the end of the first year and has systemic capacity to lead the trading in carbon finance from sustainable charcoal by the second year of the project. Local level associations for the implementation of green water credits operational by the end of the project	Project reports, Parliamentary recordings, Institutions offices, constitutions, work programmes and reports	Political interference might delay the formation of the SRB and the Malawi Earth Carbon Trust as well as the functioning of the charcoal associations
	Number of policies mainstreaming SLM	All policy statements mention importance of SLM but don't have details of how SLM will be ensured	At least 4 policies revised to mainstream SLM principles and so provide a better policy environment for SLM;	Policy discussion papers and briefs; project monitoring reports	Policy processes tend to be slow in developing countries. Speeding up the process, especially of formulating legislative frameworks will be necessary for achievement of this indicator
	Number of policies with legislation and institutional arrangement for effective implementation	None of the policies have updated and effective frameworks well linked into the Laces	Discussions for legislation and institutional arrangement for policy implementation for at least 4 key policies held by mid-term and recommendations provided adopted by end of the project	Policy discussion papers and briefs; project monitoring reports	Policy processes tend to be slow in developing countries. Speeding up the process, especially of formulating legislative frameworks will be necessary for achievement of this indicator

Project strategy	Objectively Verifiable Indicators				
	Indicator	Baseline	Target	Source verification	Risks/assumptions
	Legal status of charcoal	No clarity on the legal status of the charcoaling chain. Some aspects are legal while others are not. Production is not legal, transporting is often banned but consumption is not regulated and therefore presumably not illegal	Recommendations for policy changes needed to legalize charcoal provided by mid-term and have government support by end of the project (it is difficult for the project to commit to get the policy approved).	Policy discussion papers and briefs; project monitoring reports	Slow speed of policy process Current political willingness and support to clean up charcoal industry declines
	Revenue from charcoal going to District and national revenue	Minimal collection through licensing but none through taxation	Collection of revenue by Districts and Malawi Revenue Authority from charcoal processes increase by 25% by mid-term and 50% cumulatively by end of the project;	Budgets Project monitoring reports	Current levels of rent seeking could divert revenue collection if not changed. Slow policy change processes might delay the legislation that allows taxation to start
Private Public Partnerships (PPP) providing financial incentives for SLM (through green water credits and sustainable charcoal)	Percentage of eligible farmers participating in the green water credit scheme, hectares covered and extent of its functioning	Currently no payments being made to farmers/land owners/land users for watershed management, although ESKOM supports a tree planting programme in Blantyre	A Green Water Credits scheme agreed by end of the first year and full implementation started by end of year 3; at least 75% of eligible farmers involved covering at least 75% of the watershed; the scheme has clear operational guidelines, clearly spelling out roles and responsibilities as well as benefit sharing mechanisms	Project implementation reports	Political interference might delay the implementation of the scheme; Unusual weather conditions such as flooding may distract farmers and policy makers from the importance of institutional reform
	Amounts of money being earned by communities from sustainable charcoal	No sustainable charcoal being produced, so no money being earned from carbon finance through it	Income from sustainable charcoal increase profitability of charcoal by at least 25%	Charcoal production data captured in project reports	Political interference might delay the implementation of sustainable charcoal; Rent seekers might derail the functioning of the sustainable charcoal programme Prices of CER may fluctuate depending on international

Project strategy	Objectively Verifiable Indicators				
	Indicator	Baseline	Target	Source verification	Risks/assumptions
					demand and supply situations
	Number of groups with operational sustainable charcoal processes	No groups engaging in sustainable charcoal	At least ten groups with sustainable charcoal production operations and earning money from carbon finance;	Charcoal production data captured in project reports	Voluntary carbon markets recover from current slump occasioned by the global financial melt down
	Number of functional charcoal associations	5 charcoal associations but without functional governance systems	At least 10 charcoal associations have rules and regulations for sustainable charcoal and are actively enforcing them;	Charcoal production data captured in project reports	Current willingness and support by government and people to clean up charcoaling processes declines Current levels of rent seeking from charcoal persists
	Adoption of improved kilns in carbonization	Less than 10% use improved kilns in carbonization	Number of charcoal producers using improved kiln in carbonization in pilot districts increase by at least 30% by mid-term and a cumulative 50% by project end	Charcoal production data captured in project reports	Current willingness and support by government and people to clean up charcoaling processes declines
Crop insurance providing the basis for increased access to credits as well as increased use of up to date weather information in decision making	Number of farmers participating in the crop insurance crops and number of crops (and crop mixes) involved	National maize insurance piloted by the government; Regional level insurance piloted but now only covering cotton and tobacco (no food crops)	At least 30% of the farmers in the SRB accessing crop insurance for at least 3 important crops (and crop mixes of maize/groundnuts/cotton/tobacco) by mid-term and 45% by end of the project;	Project M&E reports	Current levels of willingness to engage in crop insurance pilots by the insurance industry declines
	Number of farmers using up-to-date weather information in decision making	Malawi has relatively good weather data but very low rates of adoption by farmers; less than 10% of farmers in the SRB use weather data for decision making	At least 50% of farmers using up-to-date information from weather stations to determine planting/harvesting dates by mid-term and at least 75% by end of project;	Project M&E reports	Farmers trust in weather prediction information from the Met department remains low (as it is today)
Knowledge and skills for	Percentage of land and resource	Less than 10% engaging in 1-2 improved	At least 25% of farmers adopting 3-5 forms of improved practices by mid-term and 75%	Sampling captured in	Prolonged drought Current levels of political

Project strategy	Objectively Verifiable Indicators				
	Indicator	Baseline	Target	Source verification	Risks/assumptions
SLM provided to resource managers at all levels	users adopting improved practices	practices consistently	cumulatively by project end	project monitoring reports	willingness and support for SLM by government and resource users declines
	Change in soil fertility	Very low and declining, exact levels for pilot districts obtained during inception	At least 10% increase in soil fertility from baselines for land users consistently engaging in 3-5 improved practices by mid-term and by 30% cumulatively by end of the project	Sampling captured in project monitoring reports	Prolonged drought Current levels of political willingness and support for SLM by government and resource users declines
	Number of people with relevant skills for SLM	Less than 20% of land users and pastoralists have skills for improved management; less than 50% of technical officers have updated SLM skills	At least 40% of land users and 30% of technical officers requiring to update skills have done so by mid-term: by the end of project, at least 60% of land users and 75% of technical officers cumulatively have updated skills.	Project training reports as part M&E reports	Current levels of political willingness and support for SLM by government and resource users declines
	Lessons generated	Limited knowledge management happening now, no clear mechanism for generating and sharing lessons	Lessons on green water credits, sustainable charcoal, crop insurance, and other important project initiatives available for dissemination through the SRB and SLM National Dialogue process	Project M&E and technical reports	Project implementation is effective and generates lessons worth sharing
	Change in agricultural productivity	Current low and declining, exact levels of selected crops to be obtained during inception	At least 20% increase in agricultural produce for key crops for those adopting 3-5 improved practices consistently by mid-term and 50% cumulative by project end	Project monitoring reports	Unusual weather event such as prolonged drought or El Nino Current levels of political willingness and support for SLM by government and resource users declines

ANNEX C. LIST OF DOCUMENTS TO BE REVIEWED BY THE EVALUATORS

- Project Document
- Annual Work Plans for the period 2010 to 2015
- Progress Reports from 2010- 2015
- Annual Reports 2010-2014
- Mid-term evaluation report for 2014
- NGO progress reports of 2014 and 2015
- PIR of 2012, 2013, 2014 and 2015
- Any other project related reports - products
- District annual reports where available
-

ANNEX D. EVALUATION QUESTIONS

This is a generic list, to be further detailed with more specific questions by CO and UNDP GEF Technical Adviser based on the particulars of the project.

Evaluative Criteria Questions	Indicators	Sources	Methodology
Relevance: How does the project relate to the main objectives of the GEF focal area, and to the environment and development priorities at the local, regional and national levels?			
•	•	•	•
Effectiveness: To what extent have the expected outcomes and objectives of the project been achieved?			
•	•	•	•
Efficiency: Was the project implemented efficiently, in-line with international and national norms and standards?			
•	•	•	•
Sustainability: To what extent are there financial, institutional, social-economic, and/or environmental risks to sustaining long-term project results?			
•	•	•	•
Impact: Are there indications that the project has contributed to, or enabled progress toward, reduced environmental stress and/or improved ecological status?			
•	•	•	•

ANNEX E. ANNEX E: RATING SCALES

Ratings for Outcomes, Effectiveness, Efficiency, M&E, I&E Execution	Sustainability ratings:	Relevance ratings
6: Highly Satisfactory (HS): no shortcomings 5: Satisfactory (S): minor shortcomings 4: Moderately Satisfactory (MS) 3. Moderately Unsatisfactory (MU): significant shortcomings 2. Unsatisfactory (U): major problems 1. Highly Unsatisfactory (HU): severe problems	4. Likely (L): negligible risks to sustainability 3. Moderately Likely (ML): moderate risks 2. Moderately Unlikely (MU): significant risks 1. Unlikely (U): severe risks	2. Relevant (R) 1.. Not relevant (NR) Impact Ratings: 3. Significant (S) 2. Minimal (M) 1. Negligible (N)
<i>Additional ratings where relevant: Not Applicable (N/A), Unable to Assess (U/A)</i>		

ANNEX F. EVALUATION CONSULTANT CODE OF CONDUCT AND AGREEMENT FORM

Evaluators:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-

respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.

6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study imitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

Evaluation Consultant Agreement Form¹⁹
Agreement to abide by the Code of Conduct for Evaluation in the UN System
Name of Consultant: _____
Name of Consultancy Organization (where relevant): _____
I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.
Signed at <i>place</i> on <i>date</i>
Signature: _____

ANNEX G. EVALUATION REPORT OUTLINE²⁰

- i. Opening page:
 - Title of UNDP supported GEF financed project
 - UNDP and GEF project ID#s.
 - Evaluation time frame and date of evaluation report
 - Region and countries included in the project
 - GEF Operational Program/Strategic Program
 - Implementing Partner and other project partners
 - Evaluation team members
 - Acknowledgements
- ii. Executive Summary
 - Project Summary Table
 - Project Description (brief)
 - Evaluation Rating Table
 - Summary of conclusions, recommendations and lessons
- iii. Acronyms and Abbreviations
(See: UNDP Editorial Manual²¹)

¹⁹ www.unevaluation.org/unegcodeofconduct

²⁰ The Report length should not exceed 40 pages in total (not including annexes).

²¹ *UNDP Style Manual, Office of Communications, Partnerships Bureau, updated November 2008*

- 1.** Introduction
 - Purpose of the evaluation
 - Scope & Methodology
 - Structure of the evaluation report
- 2.** Project description and development context
 - Project start and duration
 - Problems that the project sought to address
 - Immediate and development objectives of the project
 - Baseline Indicators established
 - Main stakeholders
 - Expected Results
- 3.** Findings

(In addition to a descriptive assessment, all criteria marked with (*) must be rated²²)

 - 3.1** Project Design / Formulation
 - Analysis of LFA/Results Framework (Project logic /strategy; Indicators)
 - Assumptions and Risks
 - Lessons from other relevant projects (e.g., same focal area) incorporated into project design
 - Planned stakeholder participation
 - Replication approach
 - UNDP comparative advantage
 - Linkages between project and other interventions within the sector
 - Management arrangements
 - 3.2** Project Implementation
 - Adaptive management (changes to the project design and project outputs during implementation)
 - Partnership arrangements (with relevant stakeholders involved in the country/region)
 - Feedback from M&E activities used for adaptive management
 - Project Finance:
 - Monitoring and evaluation: design at entry and implementation (*)
 - UNDP and Implementing Partner implementation / execution (*) coordination, and operational issues
 - 3.3** Project Results
 - Overall results (attainment of objectives) (*)
 - Relevance(*)
 - Effectiveness & Efficiency (*)
 - Country ownership
 - Mainstreaming
 - Sustainability (*)
 - Impact
- 4.** Conclusions, Recommendations & Lessons

²² Using a six-point rating scale: 6: Highly Satisfactory, 5: Satisfactory, 4: Marginally Satisfactory, 3: Marginally Unsatisfactory, 2: Unsatisfactory and 1: Highly Unsatisfactory, see section 3.5, page 37 for ratings explanations.

- Corrective actions for the design, implementation, monitoring and evaluation of the project
- Actions to follow up or reinforce initial benefits from the project
- Proposals for future directions underlining main objectives
- Best and worst practices in addressing issues relating to relevance, performance and success

5. Annexes

- ToR
- Itinerary
- List of persons interviewed
- Summary of field visits
- List of documents reviewed
- Evaluation Question Matrix
- Questionnaire used and summary of results
- Evaluation Consultant Agreement Form

ANNEX H. EVALUATION REPORT CLEARANCE FORM

(to be completed by CO and UNDP GEF Technical Adviser based in the region and included in the final document)

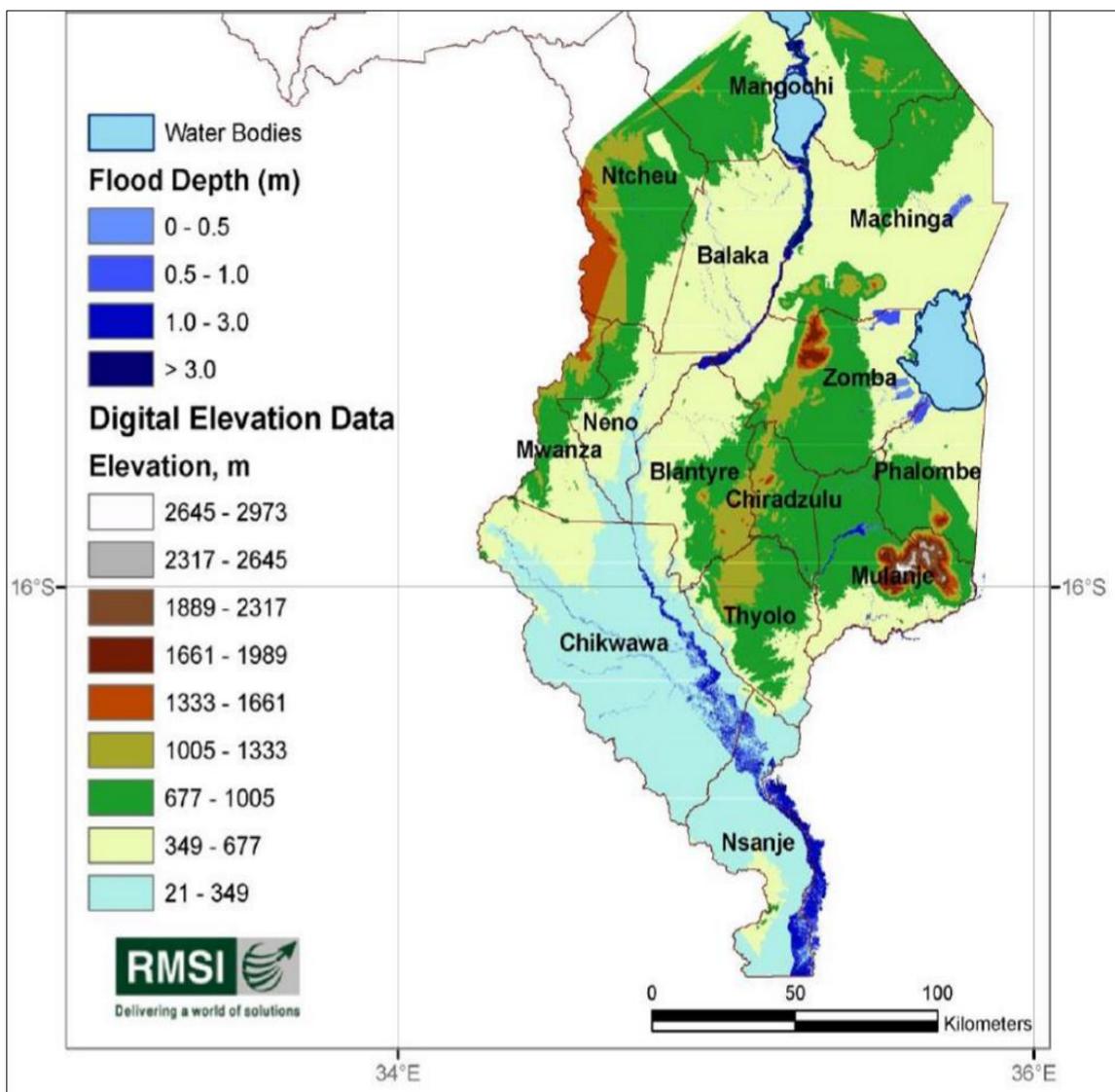
Evaluation Report Reviewed and Cleared by	
UNDP Country Office	
Name: _____	
Signature: _____	Date: _____
UNDP GEF RTA	
Name: _____	
Signature: _____	Date: _____

Appendix 2. Mission's time schedule

Date		Place	Meeting, activity
01-Nov	S	Lilongwe	<ul style="list-style-type: none"> • Arrival international consultant
02-Nov	M	Lilongwe	<ul style="list-style-type: none"> • Briefing UNDP and project
03-Nov	T	Lilongwe	<ul style="list-style-type: none"> • UNDP discussion ToR • Deputy Director & SLM Focal Person • Dep. Energy Affairs • Director of Environmental Affairs
04-Nov	W	Lilongwe	<ul style="list-style-type: none"> • Department of Forestry – Charcoal issues • Department of Forestry – Forestry Conservation • Shire River Basin Programme, PERFORM
05-Nov	T	Lilongwe	<ul style="list-style-type: none"> • Fisheries Department • Water Resources Department,
06-Nov	F	Lilongwe	<ul style="list-style-type: none"> • UNDP Inception meeting • MCA Malawi
07-Nov	S	Lilongwe	<ul style="list-style-type: none"> • Land Resources Department
08-Nov	S	travel, night Liwonde	<ul style="list-style-type: none"> • Liwonde Barrage
09-Nov	M	Balaka, night Blantyre	<ul style="list-style-type: none"> • District offices, local NGOs, communities, Wildlife Society
10-Nov	T	Blantyre, night Blantyre	<ul style="list-style-type: none"> • Government offices • ESCOM • BWB,
11-Nov	W	Blantyre, night Blantyre	<ul style="list-style-type: none"> • SRWB, DAPP • other NGOs
12-Nov	T	Blantyre, night Blantyre	<ul style="list-style-type: none"> • local NGOs • communities
13-Nov	F	Mwanza, night Mwanza	<ul style="list-style-type: none"> • District offices • local NGOs • communities • Nature Conservation Humanitarian Support
14-Nov	S	Neno, night Liwonde	<ul style="list-style-type: none"> • District offices • local NGOs • communities • COPRED
15-Nov	S	travel	<ul style="list-style-type: none"> • return to Lilongwe
16-Nov	M	Lilongwe	<ul style="list-style-type: none"> • EAD • UNDP • World Bank • JICA • Project Coordinator SLM • Chair Steering Committee
17-Nov	T	Lilongwe	<ul style="list-style-type: none"> • Preparation debriefing

Date		Place	Meeting, activity
18-Nov	W	Lilongwe	• Debriefing
19-Nov	T	Lilongwe	• Departure international consultant
23/12 - 2/12		NL/MLW	• Editing draft report
3/12 - 18/12		NL/MLW	• Circulation draft report
18/12 - 22/12		NL/MLW	• Editing final report

Appendix 3. Map of Shire River Basin and project area indicating elevation and flood depth (source: Bos 2015)



Appendix 4. List of persons interviewed

Name	Institution	Location	Designation
Benjamin Kamanga	Environmental Affairs Department	Balaka	Environmental District Officer - Balaka
Mr E. Walusa	Climate Change and Meteorological Services.	Blantyre	Equipment Officer
Mr Chris Mwambene	CURE (Green Water Credit Focal Point)	Blantyre	Executive Director
Mr Khumbo Kamanga	CURE (Green Water Credit Focal Point)	Blantyre	Capacity Building officer
Mavuto Chiipanthenga	BWB	Blantyre	Director of Technical Services
Lawrence Chilimampungu	ESCOM	Blantyre	Environmental Unit
Evans Msiska	ESCOM Blantyre	Blantyre	Director
Mr Edward Mbesa	Southern Region Water Board	Blantyre	Director of Operations
Booker Waya	BWB	Blantyre	Technical Officer
Monika Lakioni	BWB	Blantyre	Technical Officer
Monika Lakioni	BWB	Blantyre	Technical Officer
Kanae Tanaka	COVAMS	Blantyre	Project Coordinator
Moses Millinyu	JICA	Lilongwe	Program officer
Carol Flore Smereczniak	UNDP	Lilongwe	Deputy Resident Representative
Etta M'Mangisa	UNDP	Lilongwe	Program Officer
Moffat Manase	Department of Fisheries	Lilongwe	Senior Fisheries Officer & Focal person
Mustapha Kaunde	Department of Forestry	Lilongwe	Principal Forestry Officer
Teddie Kamoto	Department of Forestry	Lilongwe	Assistant Director of Forestry
Michael Makonombera	EAD	Lilongwe	Assistant Director
Ms. Yasinta Ganiza	EAD	Lilongwe	Environmental Officer
Mr Benon Yassin	EAD	Lilongwe	Chief Environmental Officer
Mr Geoffrey Chamdimba	EAD	Lilongwe	Environmental Officer
Mr. Joseph Kalowekamo	Energy Affairs Department	Lilongwe	Deputy Director/Focal Point
Ms Taonga Mbale Luka	Environmental Affairs Department (EAD)	Lilongwe	Director
Winston Sataya	Irrigation Department	Lilongwe	Deputy Director of Irrigation Services
Mihla Phiri	Land Resources Department	Lilongwe	SLM Focal Person
Jonathan Banda	Ministry of Local Government and Rural Development	Lilongwe	Rural Development Officer
Mr S Kamtukule	Senior Water Officer	Lilongwe	Water Resources Development
Laison Mseu	Water Officer	Lilongwe	SLM Focal Person, Dept. of Water
Chimwemwe Mponya	Development Aid from People to People (DAPP)	Lilongwe	Grant Manager
Dalitso Kafuwa	MCA Malawi	Lilongwe	ENRM Manager
Deputy COP (Blessings Mwale)	PERFORM	Lilongwe	Deputy COP
Mr Mapwesera	Wildlife and Environmental Society of Malawi (WESM)	Lilongwe	Executive Director
Mr William P.C. Chipeta	Shire River Basin Management	BT/Liwonde	Project Coordinator

Name	Institution	Location	Designation
	Programme		
Linda Mughogho	Environmental Affairs Department	Blantyre	Environmental District Officer - blantyre
Jarvis Mwenechanya	Environmental Affairs Department	Mwanza	Environmental District Officer - Mwanza
Enock Kalitsiro	Land Resources Department	Mwanza	Acting LRO
Justin Mbetewa	Nature Conservation for Humanitarian Support	Mwanza	Program Manager-SLM
Glad Mtambo,	Forestry Department	Mwanza	DFO
Mary Chisale	Forestry Department	Mwanza	ADFO
Davie Itimu	Fisheries Department	Neno	Acting Environmental District Officer - Neno
Emmanuel Ngwangwa	Forestry Department	Neno	Environmental District Officer - Neno
Mark Tandaude	Land Resources Department	Neno	Assistant Land Resources officer
Lawrence Phiri	Cooperative Relief for Development (COPRED) - Blantyre/Neno	Neno	Field Officer
Cornel Kanyimbo	EAD Accountant	Lilongwe	Project Accountant

Appendix 5. Communities visited and interviewed in Balaka, Blantyre, Mwanza and Neno District

Group	District	Activities	Remarks
Ulongwe Afforestation (NVRMs, VDC, Cooperative)	Balaka	River Bank Buffer Afforestation, Fruit Tree growing	River Bank Erosion a challenge in Mkasi River
Ulongwe Bee-Keeping	Balaka	Beekeeping and protection of natural forests	Bee keepers making money, forests being protected but more efforts needed on honey marketing
Ulongwe Natural Tree Regeneration	Balaka	Natural trees protected and re-growing. Forest re-established	Forest by laws enacted by local traditional leadership
Kunthembwe Value Addition Group (Groundnut oil and powder making)	Blantyre	Factory for making groundnut oil powder as AIGAS. Machinery provided by OVOP, SLM provided funds for raw inputs	ESCOM Power yet to be connected. Machines idle
Cassava Cuttings Multiplication Group	Blantyre	Promotion of cassava for seed and income. Providing alternative to	Cassava cuttings pass-on arrangement has potential to provide cassava cuttings to the whole community.
Natural Forest Regeneration	Blantyre	Natural trees protected and re-growing. Forest re-established	Forest by laws enacted by local traditional leadership
Tulongkhondo Group	Mwanza	Tree nurseries, natural forest regeneration, fruit trees,	Potential for communities to earn income.
Magaleta Group	Neno	Afforestation, CA, natural tree regeneration, swales,	Individual farmers taking up SLM technologies. Impressive.
Lead Farmer	Neno	CA, vetiver planting, marker ridges, rock bunds	A good example of CA seen here.

Appendix 6. List of participants of the terminal evaluation debriefing on 18 November 2015 at the EAD in Lilongwe

Name	Position	Organization	Organization in Full
Mr Paulo Chiziwa	Programme Officer	DAPP	Development Aid people to People
Mr Chris Mwambene	Executive Director	CURE	Coordination Union for the Rehabilitation of the Environment
Mr. Amon Kabuli	Project Manager	EAD	Environmental Affairs Department
Mustapha Kaunde	Principal Forestry Officer	DoF	Department of Forestry
Mr. Geoffrey Chadimba	Environmental Officer	EAD	Environmental Affairs Department
Mrs Etta M'Mangisa	Desk officer	UNDP	United Nations Development Programme
Mr A. Sukasuka	Energy Officer	DEA	Department of Energy Affairs
Kenneth A. Wiyo	Consultant	UNDP	United Nations Development Programme
Floris Deodatus	Consultant	UNDP	United Nations Development Programme

Appendix 7. List of documents reviewed

Project cycle management documents

Project Document

Annual Work Plans for the period 2010 to 2015

Progress Reports from 2010- 2015

Annual Reports 2010-2014

Mid-term evaluation report 2014

NGO progress reports of 2014 and 2015

PIR of 2012, 2013, 2014 and 2015

District quarterly and annual reports where available

Consultancy reports

Bos, W. v.d., 2015. Satellite-Derived Weather Index Insurance in Malawi: Methodology, Design and Implementation.

DCCMS, 2012. Assessment of Dense Network Station in the Shire River Basin.

EAD, 2015. Best Practices in Sustainable Land Management. Case study of activities and principles applied in the Sustainable Land management Project 2010-2015.

Fleskens L., Chilima C., 2013. Development of a Green Water Credit Scheme in the Shire River Basin.

Makaudze E., Bos W.v.d., 2015. Developing an implementable weather index crop insurance for the shire river basin in Malawi.

Mutimba S., Kamoto J., 2013. Consultancy to review policies and regulations on charcoal and how to promote a systems approach to sustainable charcoal production and use in Malawi.

Stephen Nanthambwe 2013. Policy Sector Review for Incorporating Sustainable Land Management in the Shire River Basin and Development of an Institutional Framework for Sustainable Land Management.

Other documents

Anon., 2006. Malawi's National Adaptation Programmes of Action (NAPA) under the United Nations Framework Convention on Climate Change (UNFCCC) - first edition. Ministry of Mines, Natural Resources and Environment. Environmental Affairs Department.

OECD, 2006. Applying Strategic Environmental Assessment - Good practice guidance for development co-operation. Paris: DAC Guidelines and Reference Series, OECD. Retrieved from www.oecd.org/dataoecd/4/21/37353858.pdf.

Shela O.N., 2000. Naturalisation of Lake Malawi levels and shire river flows. Challenges of Water Resources Research and Sustainable Utilisation of the Lake Malawi-Shire River System. 1st

WARFSA/WaterNet Symposium: Sustainable Use of Water Resources, Maputo, 1-2
November 2000

UNDP, 2009. Handbook on planning, monitoring and evaluating for development results. UNDP,
New York.

UNDP, 2012. United Nations Development Assistance Framework 2012 – 2016

Wang C., 2012. A Guide for Local Benefit Sharing in Hydropower Projects. World Bank. Social
Development Working Papers. Paper No. 128/June 2012.

Appendix 8. Evaluation questions framework

Performance Criteria	Guiding Evaluation Questions	Approach
1. Relevance	<p><i>How does the project relate to the main objectives of the GEF focal area, and to the environment and development priorities at the local, regional and national levels?</i></p> <p>a. To what extent do the project objectives and interventions contribute to the UNDP priorities (food security, poverty alleviation, improved governance, resilience, gender)?</p> <p>b. To what extent do the project objectives and interventions contribute to the GEF focal area strategies (Land degradation, Sustainable forest management, Climate change adaptation)?</p> <p>c. Are activities and outputs of the project consistent with the strategic framework of the project?</p>	document review, interviews
2. Effectiveness	<p><i>To what extent have the expected outcomes and objectives of the project been achieved?</i></p> <p>a. To what extent were the objectives achieved/are likely to be achieved (policy & legislation, PPP involvement in PES, building climate resilience, capacity building and knowledge sharing)?</p> <p>b. What are the major factors influencing the achievement or non-achievement of the expected results?</p> <p>c. Were project results achieved on time? In which implementation stage did delays occur?</p>	document review, interviews
3. Efficiency	<p><i>Was the project implemented efficiently, in-line with international and national norms and standards?</i></p> <p>a. To what extent has the project and Management Unit Secretariat efficiently managed the project?</p> <p>b. How effective were the partners working on the project contribute to the overall goal of the project?</p> <p>c. To what extent have management worked in partnership with mother ministry/department and its implementing partners and contributing to greater efficiencies in the delivery of the project. Level of involvement with Dec/district/NGO officials.</p> <p>d. Was the project implemented in the most efficient way compared to alternatives?</p> <p>e. To what extent has there been value for money in relation with project scope and objectives?</p>	document review, interviews
4. Impact:	<p><i>Are there indications that the project has contributed to, or enabled progress toward, reduced environmental stress and/or improved ecological status?</i></p>	document review, interviews, analysis of

Performance Criteria	Guiding Evaluation Questions	Approach
	<ul style="list-style-type: none"> a. What has happened to the impact indicators as a result of the project (erosion, forest cover, hydrological parameters)? b. What real difference have the activities made to the beneficiaries (capacity, crop loss, income, community assets)? 	existing statistics
5. Sustainability	<p><i>To what extent are there financial, institutional, social-economic, and/or environmental risks to sustaining long-term project results?</i></p> <ul style="list-style-type: none"> a. Is there evidence that ecological and socio-economic benefits resulting from the project are likely to be sustained (developed manpower and skills, policy support, economic and financial sustainability, political embedding, socio-cultural embedding, appropriate technology, environmental protection, institutional management capacity) b. Is there sufficient scope for replication and upscaling of the realizations of the project? c. What are the major factors which influence achievement or non-achievement of sustainability of the project? 	document review, interviews

Appendix 9. Rating scales

<i>Ratings for Outcomes, Effectiveness, Efficiency, M&E, I&E Execution</i>	<i>Sustainability ratings:</i>	<i>Relevance ratings</i>
<p>6: Highly Satisfactory (HS): no shortcomings</p> <p>5: Satisfactory (S): minor shortcomings</p> <p>4: Moderately Satisfactory (MS)</p> <p>3. Moderately Unsatisfactory (MU): significant shortcomings</p> <p>2. Unsatisfactory (U): major problems</p> <p>1. Highly Unsatisfactory (HU): severe problems</p>	<p>4. Likely (L): negligible risks to sustainability</p> <p>3. Moderately Likely (ML): moderate risks</p> <p>2. Moderately Unlikely (MU): significant risks</p> <p>1. Unlikely (U): severe risks</p>	<p>2. Relevant (R)</p> <p>1.. Not relevant (NR)</p> <p><i>Impact Ratings:</i></p> <p>3. Significant (S)</p> <p>2. Minimal (M)</p> <p>1. Negligible (N)</p>
<p><i>Additional ratings where relevant:</i></p> <p>Not Applicable (N/A)</p> <p>Unable to Assess (U/A)</p>		

Appendix 10. Project progress matrix

Objective/Outcome	Description of Indicator	Baseline Level	Target Level at end of project	Status at Mid Term Review	Status at Terminal Evaluation
Objective To provide policy, institutional and financial enabling environment for the sustained adoption of SLM in the Shire River Basin	Over 800,000 ha under direct SLM (project pilot area) and 1,000,000 ha impacted by up-scaling in next 4 yrs	Minimal land being managed in accordance with principles of SLM or integrated water and land management	At least 600,000 ha under direct SLM (project pilot area) by mid-term and at least 1,000,000 ha impacted by up-scaling by the end of the project	<ul style="list-style-type: none"> A total of 10, 349 ha under SLM in Neno, Blantyre, Balaka and Mwanza Districts (conservation agriculture (CA) practices, afforestation, Ridge Alignment, Vetiver and Natural Regeneration) 	<ul style="list-style-type: none"> About 158,645ha impacted by SLM in 4 districts: Balaka, 60,296 ha, Blantyre 43,092 ha, Neno 25,105 ha, and Mwanza 30,152. 4 NGOs engaged (NACOHUSO in Mwanza, WESM in Balaka, DAPP in Blantyre, and COPRED in Neno) 4 district assemblies to up-scale successful SLM technologies Various approaches were promoted by the project such as Bush fire management, marker ridges, box ridges, conservation agriculture, swales, vetiver planting and fruit trees production, livelihood initiatives.
	Reduction in the rates of deforestation	Currently 6% per annum in the SRB	Rate of deforestation reduced by at least 50% by the end of the project	<ul style="list-style-type: none"> No data available FAO study indicates current deforestation rates 2 - 4% 	<ul style="list-style-type: none"> SLM project estimates 50% reduction in SLM impact areas.
	Improvement in the conditions of woodlands	Currently seriously degraded with many bare patches	At least 50% increase in woody vegetation in urban areas and currently degraded areas as measured through increased density of tree species, increased species index in re-vegetated/naturally recovering patches and improved population structure of selected	<ul style="list-style-type: none"> Rehabilitation started in 1) Buffer zone along the river banks of Nkasi (19km), Mpale (8km) in Balaka district (elephant grass, reed inter-planting, trees along 15 meter buffer zones: Glycidia, Cassia Siamea, Khaya Nyasa, Acacia, Albizia Lebec, Cassia Spectabilis 440,000 tree seedlings planted 2) 80 hectares are under afforestation (Balaka 22ha, Neno 15ha, Mwanza 	<ul style="list-style-type: none"> 40% increase in woody vegetation through up scaling SLM technologies 150,000ha through bushfire control, natural forest regeneration and planted seedlings 53,000 Trees planted: Balaka (11,900), Mwanza (10,000), Neno (20,000), Blantyre (12,989)

Objective/Outcome	Description of Indicator	Baseline Level	Target Level at end of project	Status at Mid Term Review	Status at Terminal Evaluation
			forests/woodlands sampled	<p>9ha and Blantyre 34ha)</p> <ul style="list-style-type: none"> • 200,000 different trees planted: 85,000 in Balaka, 55,000 in Neno, 37,500 in Blantyre and 22,500 in Mwanza (survival rate 65% due to fires). • 9,485 hectares has been set aside for natural regeneration: 5,277ha in Balaka 1,317 in Blantyre, 628 ha in Neno and 2,262 in Mwanza 	
	Carbon mitigated from sustainable charcoaling	Currently no sustainable charcoaling and no carbon mitigated from it	At least half a million tons of carbon dioxide mitigated from sustainable charcoal in the districts by mid-term and a million cumulative at the end of the project	<ul style="list-style-type: none"> • No progress on quantification of carbon mitigation • Draft strategy providing guidelines on piloting sustainable charcoal production developed 	<ul style="list-style-type: none"> • Based on 150000 hectare SLM coverage (LULUCF) over a period of 4 years contributed to an estimated mitigation of $0.5 \times 150000 \times 3 = 225,000$ tons CO₂
	Reduction in soil erosion	More than 85% of land experiencing serious forms of erosion	At least half of land under improved SLM registers at least 15% reduction in soil erosion by mid-term and 40% cumulative by end of project	<ul style="list-style-type: none"> • No soil erosion measured yet in the wider basin 	<ul style="list-style-type: none"> • Soil erosion reduced more than 40% over area of 150,000ha through increased ground cover from grass and trees, effective bushfire control and natural regeneration • Soil Loss studies indicate that contour ridging mean annual soil losses range from 4.7 tha-1yr-1, to 13.1 tha-1yr-1 and 22.5 tha-1yr-1
	Change in household wellbeing	More than 95% of households below the UN defined poverty line	At least 25% improvement in household welfare for a minimum of 75% of the households in pilot districts, as measured by percentage increase in household income, percentage	<ul style="list-style-type: none"> • Preliminary assessment indicate significant increase in the number of Income Generating Activities (IGAs) being practiced by beneficiaries 	<ul style="list-style-type: none"> • 45% of households have improved incomes from alternative livelihoods

Objective/Outcome	Description of Indicator	Baseline Level	Target Level at end of project	Status at Mid Term Review	Status at Terminal Evaluation
			reduction in number of food insecure days etc.		
Outcome 1 The policy, regulatory and institutional arrangement support sustainable land management in the Shire River Basin	Number of functional institutions leading/participating in SLM in the SRB	No regional institution with the systemic capacity and mandate to coordinate integrated water and resource management in the SRB; local level environment management institutions present, but have weak capacities and are poorly coordinated	River Shire Basin Authority established by the end of the 2nd year and has adequate governance mechanisms to allow participatory decision making, enough autonomy for effective operations, liquidity and a realistic financing strategy, and adequate capacity to effectively coordinate development that mainstreams SLM in the Basin; Charcoal associations established and have by-laws and capacity to organize sustainable charcoal production by the Malawi Earth Carbon Trust Fund formed by the end of the first year and has systemic capacity to lead the trading in carbon finance from sustainable charcoal by the second year Local level associations for the implementation of green water credits operational by the end of the project	<ul style="list-style-type: none"> • 5 Donors currently working on SLM SRB: World Bank, UNDP/GEF (on this SLM project), EU, JICA and USAID • MCC) • Water Bill has been passed providing basis for establishment Shire River Basin Authority • dialogue started among stakeholders on formation of authority • Review of policies, regulations and institutions in the Shire River Basin has finalised • Formation of associations started in Mwanza and Neno for sustainable charcoal production • 6 groups bee keeping groups supported to provide alternative to unsustainable charcoal 	<ul style="list-style-type: none"> • World Bank funded Shire River Basin Management Programme to develop river basin management organization • Other donor projects intervening in the field of SLM EU, JICA, and USAID • Local NGOs subcontracted by SLM project to upscale successful SLM: Coordination Union for the CURE, WESM, NACOHUSO and COPRED
	Number of policies mainstreaming	All policy statements mention	At least 4 policies revised to mainstream SLM principles and so provide a better	<ul style="list-style-type: none"> • Completed review of policies on Environment, Water, Fisheries, 	<ul style="list-style-type: none"> • Review of policies and legislation completed for the ENRM, CC and DRM

Objective/Outcome	Description of Indicator	Baseline Level	Target Level at end of project	Status at Mid Term Review	Status at Terminal Evaluation
	SLM	importance of SLM but don't have details of how SLM will be ensured	policy environment for SLM;	<p>Forestry, Wildlife, Energy, Land, Agriculture, Irrigation, Construction and Planning and Mining.</p> <ul style="list-style-type: none"> • Forestry and Water Policy revised including SLM 	<p>sector were reviewed for conduciveness to SLM.</p> <ul style="list-style-type: none"> • SLM approaches mainstreamed in the revised Fisheries and Forestry Policies • For 2015, reviews targeted Energy and Wildlife Policy. • Parks and Wildlife and Energy policies are currently under review and being aligned to SLM [HS]
	Number of policies with legislation and institutional arrangement for effective implementation	None of the policies have updated and effective frameworks well linked into the LCs	Discussions for legislation and institutional arrangement for policy implementation for at least 4 key policies held by mid-term and recommendations provided adopted by end of the project	<ul style="list-style-type: none"> • Fisheries and Forestry Policies revised and include provisions for SLM by the PEI Project but the SLM Secretariat made significant contributions to include SLM principles • Ministry started training programs on bushfire management 	<ul style="list-style-type: none"> • 4 policies have legislation and institutional arrangement for the effective implementation of SLM: energy policy, fisheries policy, wildlife policy and forest policy.
	Legal status of charcoal	No clarity on the legal status of the charcoaling chain. Some aspects are legal while others are not. Production is not legal, transporting is often banned but consumption is not regulated and therefore presumably not illegal	Recommendations for policy changes needed to legalize charcoal provided by mid-term and have government support by end of the project (t is difficult for the project to commit to get the policy approved).	<ul style="list-style-type: none"> • Draft strategy for sustainable charcoal prepared 	<ul style="list-style-type: none"> • Policy changes recommended to legalize sustainable charcoal production • Adoption of sustainable charcoal promoted through advocacy and awareness using among others the results of the first efficient charcoal kilns pilot
	Revenue from charcoal going to	Minimal collection through licensing	Collection of revenue by Districts and Malawi	<ul style="list-style-type: none"> • Only revenues from sale of 	<ul style="list-style-type: none"> • Additional income from charcoal for

Objective/Outcome	Description of Indicator	Baseline Level	Target Level at end of project	Status at Mid Term Review	Status at Terminal Evaluation
	District and national revenue	but none through taxation	Revenue Authority from charcoal processes increase by 25% by mid-term and 50% cumulatively by end of the project	confiscated charcoal is generated by Districts	<p>communities and taxes to government have not yet achieved</p> <ul style="list-style-type: none"> • Delays by government of accepting charcoal as a legal and taxable good has been a major contributor to the process • Efficient kilns tested in Chikangawa Forest by private company Kawandama Hills Ltd which has been licensed to produce charcoal from 15000 ha Eucalyptus plantation in Chikangawa
Outcome 2 Private Public Partnerships (PPP) providing financial incentives for SLM (through green water credits and sustainable charcoal)	Percentage of eligible farmers participating in the green water credit scheme, hectares covered and extent of its functioning	Currently no payments being made to farmers/land owners/land users for watershed management, although ESCOM supports a tree planting programme in Blantyre	A Green Water Credits scheme agreed by end of the first year and full implementation started by end of year 3; at least 75% of eligible farmers involved covering at least 75% of the watershed; the scheme has clear operational guidelines, clearly spelling out roles and responsibilities as well as benefit sharing mechanisms	<ul style="list-style-type: none"> • Strategy for development of green water credits scheme finalized • No farmers participating in schemes yet 	<ul style="list-style-type: none"> • Feasibility study on GWC in Malawi completed in 2013 • NGO CURE recruited to pilot PES scheme in Mwanza and Balaka • CURE mobilizing buyers and downstream communities willing to participate • CURE drawing up a list of indicators to measure improvements of catchments • Two pilot sites selected in Balaka and Mwanza to test establishing GWC covering 42,240ha
	Amounts of money being earned by communities from sustainable charcoal	No sustainable charcoal being produced, so no money being earned from carbon finance through it	Income from sustainable charcoal increase profitability of charcoal by at least 25%	<ul style="list-style-type: none"> • Communities not earning money from sustainable charcoal yet • Draft strategy for sustainable charcoal in Malawi prepared 	<ul style="list-style-type: none"> • Communities not earning money from sustainable charcoal yet • Reluctance of government with regard to accepting charcoal as a legal and taxable good has been mayor cause of delay • Private company Kawandama Hills Ltd

Objective/Outcome	Description of Indicator	Baseline Level	Target Level at end of project	Status at Mid Term Review	Status at Terminal Evaluation
					licensed to produce sustainable charcoal from 15000 ha Eucalyptus plantation in Chikangawa to pilot different types of kilns
	Number of groups with operational sustainable charcoal processes.	No groups engaging in sustainable charcoal	At least ten groups with sustainable charcoal production operations and earning money from carbon finance;	<ul style="list-style-type: none"> no operational groups producing charcoal 	<ul style="list-style-type: none"> No sustainable charcoal being produced
	Number of functional charcoal associations	5 charcoal associations but without functional governance systems	At least 10 charcoal associations have rules and regulations for sustainable charcoal and are actively enforcing them;	<ul style="list-style-type: none"> 11 sustainable charcoal producer associations have been formed and supported with initial preparations for switching from unsustainable to sustainable charcoal production: Tulonkhondo, Mulindi, Kunthembe, Muotcha, Kanduku, Magareta, Lundu, Mdunga, Govati, Chirombo, Simbota. Each group has 15-30 members. Groups are receiving training on sustainable charcoal production, forestry, formulating group constitutions and strategic planning. 	<ul style="list-style-type: none"> 11 out of the targeted 5 charcoal associations in Mwanza, Balaka and Neno which are the major charcoal producing areas. The Charcoal Association have been provided with training in sustainable charcoal production, cooperative management, alternative livelihood activities and business management skills
	Adoption of improved kilns in carbonization	Less than 10% use improved kilns in carbonization	Number of charcoal producers using improved kiln in carbonization in pilot districts increase by at least 30% by mid-term and a cumulative 50% by project end	<ul style="list-style-type: none"> No carbonisation in improved kilns apart from pilot Chikangawa Adam Retort was chosen for piloting in Chikangawa and Zomba Plantations, Orange kiln for Blantyre Fuelwood Area, and Casamance retort for Dedza Plantation. 	<ul style="list-style-type: none"> No carbonisation in improved kilns apart from pilot Chikangawa Cassamance, Half Orange and Adams Retort tested in Chikangawa Forest by private company Kawandama Hills Ltd licensed to produce charcoal from 15000 ha Eucalyptus in Chikangawa
Outcome 3 Crop insurance providing the basis	Number of farmers participating in	National maize insurance piloted by the	At least 30% of the farmers in the SRB accessing crop insurance for at least 3	<ul style="list-style-type: none"> Strategy in preparation 	<ul style="list-style-type: none"> Crop insurance not operationalized Draft strategy prepared Major delays by the consultants to

Objective/Outcome	Description of Indicator	Baseline Level	Target Level at end of project	Status at Mid Term Review	Status at Terminal Evaluation
for increased access to credits as well as increased use of up to date weather information in decision making	the crop insurance crops and number of crops (and crop mixes) involved	government; Regional level insurance piloted but now only covering cotton and tobacco (no food crops)	important crops (and crop mixes of maize/groundnuts/cotton/tobacco) by mid-term and 45% by end of the project;		complete this assignment
	Number of farmers using up-to-date weather information in decision making	Malawi has relatively good weather data but very low rates of adoption by farmers; less than 10% of farmers in the SRB use weather data for decision making	At least 50% of farmers using up-to-date information from weather stations to determine planting/harvesting dates by mid-term and at least 75% by end of project;	<ul style="list-style-type: none"> No implementation of weather based crop insurance scheme Strategy being developed Due to the nature of the study Weather data appeared difficult to obtain. 	<ul style="list-style-type: none"> No Automatic Weather Station operational²³ No information on soil moisture as suggested in consultant report available to farmers
Outcome 4 Knowledge and skills for SLM provided to resource managers at all levels	Percentage of land and resource users adopting improved practices	Less than 10% engaging in 1-2 improved practices consistently	At least 25% of farmers adopting 3-5 forms of improved practices by mid-term and 75% cumulatively by project end	<ul style="list-style-type: none"> Socio-economic survey completed Preliminary assessment shows that about 75% of the farmers have adopted more than two SLM technologies Report to be finalized in the third quarter of 2013 	<ul style="list-style-type: none"> At least 77% of the beneficiaries are currently adopting 3 practices in the SLM impact areas
	Change in soil fertility	Very low and declining, exact levels for pilot districts obtained during inception	At least 10% increase in soil fertility from baselines for land users consistently engaging in 3-5 improved practices by mid-term and	<ul style="list-style-type: none"> No measurements on soil fertility Improved harvests in impact areas could be attributed to SLM interventions by project 	<ul style="list-style-type: none"> Reduced soil erosion by more than 40% of the 150,000 ha under SLM by the project Results from our Soil Loss studies

²³ According to the PIR (June 2015) one new AWS had been installed in Neno with funding from the project. However, according to the Department of Climate Change and Meteorology the unit is not configured - moreover it turned out when the evaluators visited Neno in November 2015 that the AWS has not been installed at all

Objective/Outcome	Description of Indicator	Baseline Level	Target Level at end of project	Status at Mid Term Review	Status at Terminal Evaluation
			by 30% cumulatively by end of the project		show increased nitrogen as well as P and K
	Number of people with relevant skills for SLM	Less than 20% of land users and pastoralists have skills for improved management; less than 50% of technical officers have updated SLM skills	At least 40% of land users and 30% of technical officers requiring to update skills have done so by mid-term: by the end of project, at least 60% of land users and 75% of technical officers cumulatively have updated skills.	<ul style="list-style-type: none"> 75% of the technical personnel trained in SLM (mulching, compost making, agroforestry practices, minimum tillage) 75% of lead farmers have been trained in SLM lead farmers have in turn trained 6,000-7,000 other farmers Members of the 11 sustainable charcoal associations trained on sustainable charcoaling, strategic planning, group dynamics, constitution making and organizations, financial management 	<ul style="list-style-type: none"> 70% of land users and over 80% of technical officers trained in SLM by SLM project, COVAMS, SRBMP and MCI. Capacity district staff strengthened in Land Use Planning and Participatory Forestry Management
	Lessons generated	Limited knowledge management happening now, no clear mechanism for generating and sharing lessons	Lessons on green water credits, sustainable charcoal, crop insurance, and other important project initiatives available for dissemination through the SRB and SLM National Dialogue process	<ul style="list-style-type: none"> Livelihood approach in natural resources management is viable as it offers alternative sources of income for the communities. For example bee- keeping and fish farming contribute to improved catchment management as well as improved welfare of beneficiaries embarking on co-management 	<ul style="list-style-type: none"> Lessons: bushfire control, soil and water conservation at micro-catchment level, livelihood approach to sustainable land management, natural forest regeneration as successful example of forest recovery, Green Charcoal, Green Water Credit Lessons and best practices documented and booklet to be developed and shared with stakeholders
	Change in agricultural productivity	Current low and declining, exact levels of selected crops to be obtained during	At least 20% increase in agricultural produce for key crops for those adopting 3-5 improved practices consistently by mid-term	<ul style="list-style-type: none"> Socio-economics survey undertaken and results analysed Farmers adopting Conservation Agriculture appeared to have 50-100% 	<ul style="list-style-type: none"> Continued higher levels of crop yield in the impact areas as result of improvement in soil fertility and reduced soil erosion

Objective/Outcome	Description of Indicator	Baseline Level	Target Level at end of project	Status at Mid Term Review	Status at Terminal Evaluation
		inception	and 50% cumulative by project end	<p>increase in maize, ground nuts and other crops in Ulongwe (Balaka), Neno and Kunthembwe Blantyre</p> <ul style="list-style-type: none"> • Ridge alignment and compost manure, resulted in productivity increase of at least 30% • Food security increased through crop diversification (cassava and sweet potato as drought tolerant crops in Blantyre and Mwanza) 	<ul style="list-style-type: none"> • More than 70% of households have adopted 2-3 SLM practices, resulting in higher yields for maize (averaging 1.8 Mt/hectare)

Appendix 11. Experts involved in the SLM project

Name	Country	Task	Period	Working days
Stephen Namthabwe	Malawi	Policies	12/2 - 30/5 2013	30
Ephias Makaudze	Zimbabwe	crop insurance	12/2 - 30/5 2013	28
Judith Kamoto	Malawi	Charcoal	18/2 - 30/5 2013	25
Stephen Mutimba	Kenya	Charcoal	12/2 - 30/5 2013	28
Luuk Fleskens	UK	PES	18/2 - 30/5 2013	25
Clement Chilima	Malawi	PES	18/2 30/5 2013	25
Wim van den Bos	Malawi	Crop insurance	12/2 30/5 2013	25
Blessings Mwale	Malawi	Project Manager	7/10/11 - 30/6/2012	full time
Amon Kabuli	Malawi	Project Manager	8/10/2012 - 31/12/2015	full time
Henry Sibanda	Zimbabwe	Technical Advisor	1/10/2012 - 30/6/2015	full time

Appendix 12. Statement of fixed Assets and Equipment as at 3rd November 2015

Acquisition date	QTY	Description	Responsible person/entity	Item location	Mk Value
30/12/13	1	Automatic Weather Station	Meteorological Department	Neno District	MK 7,333,527.00
06/12/12	1	Printer 3 in one ie. Printer, Scanner and Photocopier	Project Manager	Outreach Section	MK 170,032.00
06/12/12	2	Air Conditioners	PM & PA	E&O and Advisors' office	MK 817,014.50
02/04/12	1	Nissan Double Cabin	Project Manager's Office	Outreach Section	US\$ 140,000.00
17/10/2011	2	HP Desktop 500B MT E750	Project Manager's Office	Outreach Section	US\$ 1,080.00
17/10/2011	3	HP Notebooks	Project Manager's Office	Outreach Section	US\$ 2,165.00
17/10/2011	1	CANON A1200 Digital Camera 12MP	Project Manager's Office	Outreach Section	US\$ 159.00
17/10/2011	4	External Hard drivers 3.5" 1 TB Western Digital USB 2.0 & 3.0	Project Manager's Office	Outreach Section	US\$ 443.00
17/10/2011	2	APC Sack UPS 650va - Model BK650 - AS	Project Manager's Office	Outreach Section	US\$ 217.00

Appendix 13. Disbursements from UNDP to EAD and districts (source UNDP Malawi Finance)

Date	Reference	Name	MK
16/11/2011	SLM skills building	Neno District Assembly	11,663,025
16/11/2011	SLM skills building Blantyre	Blantyre District Council	11,596,692
17/11/2011	SLM skills building Mwanza	Mwanza District Council	13,383,560
17/11/2011	SLM skills building Mwanza	Mwanza District Council	13,383,560
17/11/2011	SLM skills building Balaka	Balaka District Council	10,821,880
17/04/2012	2nd quarter advance	EAD	15,744,500
18/10/2012	SLM 2nd tranch Mwanza	Mwanza District Council	11,117,158
18/10/2012	SLM 2nd tranch Balaka	Balaka District Council	12,871,827
18/10/2012	SLM 2nd tranch Blantyre	Blantyre District Council	12,179,176
19/10/2012	SLM 2nd tranch - Neno	Neno District Assembly	12,341,540
15/11/2012	4th quarter advance	EAD	10,465,805
29/04/2013	2nd quarter advance GEF	EAD	31,514,980
02/08/2013	SLM district activities	Neno District Assembly	9,655,309
02/08/2013	SLM activities MN GEF	Mwanza District Council	19,797,720
02/08/2013	SLM activities Mwanza	Mwanza District Council	2,300,670
02/08/2013	SLM district activities BK trac	Balaka District Council	4,717,602
02/08/2013	SLM district activities Balaka	Balaka District Council	5,682,326
02/08/2013	SLM district activities BT GEF	Blantyre District Council	12,530,938
02/08/2013	SLM district activities Blanty	Blantyre District Council	3,044,820
09/09/2013	3rd quarter advance	EAD	56,767,420
22/04/2014	2nd quarter advance 2014	EAD	47,600,200
14/11/2014	4th quarter advance	EAD	131,430,000
10/06/2015	SLM GEF 1st advance	EAD	49,235,000

Appendix 14. Evaluation Consultant Agreement Form

Evaluators:

1. Must present information that is complete and fair in its assessment of strengths and weaknesses so that decisions or actions taken are well founded.
2. Must disclose the full set of evaluation findings along with information on their limitations and have this accessible to all affected by the evaluation with expressed legal rights to receive results.
3. Should protect the anonymity and confidentiality of individual informants. They should provide maximum notice, minimize demands on time, and respect people's right not to engage. Evaluators must respect people's right to provide information in confidence, and must ensure that sensitive information cannot be traced to its source. Evaluators are not expected to evaluate individuals, and must balance an evaluation of management functions with this general principle.
4. Sometimes uncover evidence of wrongdoing while conducting evaluations. Such cases must be reported discreetly to the appropriate investigative body. Evaluators should consult with other relevant oversight entities when there is any doubt about if and how issues should be reported.
5. Should be sensitive to beliefs, manners and customs and act with integrity and honesty in their relations with all stakeholders. In line with the UN Universal Declaration of Human Rights, evaluators must be sensitive to and address issues of discrimination and gender equality. They should avoid offending the dignity and self-respect of those persons with whom they come in contact in the course of the evaluation. Knowing that evaluation might negatively affect the interests of some stakeholders, evaluators should conduct the evaluation and communicate its purpose and results in a way that clearly respects the stakeholders' dignity and self-worth.
6. Are responsible for their performance and their product(s). They are responsible for the clear, accurate and fair written and/or oral presentation of study imitations, findings and recommendations.
7. Should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

Evaluation Consultant Agreement Form²⁴

Agreement to abide by the Code of Conduct for Evaluation in the UN System

Name of Consultant: _____

Name of Consultancy Organization (where relevant): _____

I confirm that I have received and understood and will abide by the United Nations Code of Conduct for Evaluation.

Signed at *place* on *date*

Signature: _____

²⁴www.unevaluation.org/unegcodeofconduct

Appendix 15. Short profile of the evaluation team

Drs. Floris Deodatus is a senior environmental expert trained in ecology and land management having over 25 years experience with natural resources management (including biodiversity, wildlife, protected areas, forestry, water, rural energy, ...) and extensive experience with project cycle management. He has been involved in 23 evaluation missions (16 times as team leader) in Africa, Asia and Eastern Europe, and he collaborated in 14 formulations (6 times as team leader). Additional to that he has been programme manager of two natural resources funding programmes (PIN/OS and Nature & Poverty) of the Dutch Government (DGIS) which involved the development and implementation of results based M&E systems and institutional learning systems. He carried out a number of significant assignments related to environmental policy development and implementation for organisations such as UNDP, World Bank and EC, including an Environmental Impact Risks and Opportunity Assessment in South Sudan, and Strategic Environmental Assessments in Yemen, Burkina Faso and Ivory Coast, as well as training to policy makers on environment mainstreaming of various African countries. As member of the expert pool of the Netherlands Commission for Environmental Assessment he carried out assessments of environment mainstreaming in Dutch cooperation programmes in South Sudan and Bangladesh, and collaborated in the delivery of training in SEA techniques to West African decision takers in the mining section.

Dr. Kenneth Wiyo is an experienced Land and Water Management Expert with experience in evaluations, baseline studies, feasibility studies and ESIA. He has over 20 years experience in land and water management. He is currently Associate Professor in Land and Water Management at Lilongwe University of Agriculture and Natural Resources. He has been involved in several evaluations, baselines, feasibility, beneficiary assessments, ESIA, national task forces and international missions. He is knowledgeable on all 28 districts of Malawi in terms of livelihoods, agriculture, irrigation, food security, land use, disaster profiles and environmental drivers leading to deforestation. He has vast network of officials (government, FBOs, NGOs) in all 28 districts of Malawi. He has carried out definitive consultancies for UNDP, UNICEF, FAO, IFAD, WORLD BANK, USAID, EU, AfDB and several NGOs and government ministries. Has written extensively on Environmental Issues affecting Malawi (e.g Deforestation), Irrigation, Lake-Malawi-Shire River Hydrology. He worked for USAID as a senior Agricultural/Environmental Officer (2002-2006) as USAID Programmes Development Specialist. He has interacted with government officials and development partners at a very senior level working on environmental challenges, food security, natural disasters, agriculture, irrigation, poverty issues and livelihoods (e.g vulnerability assessment).