



United Nations Environment Programme

**Terminal Evaluation of the Project: “Developing an Experimental
Methodology for Testing the Effectiveness of Payment for Ecosystem
Services to Enhance Conservation in Production Landscapes in Uganda”
(GEF project ID: 3682)**

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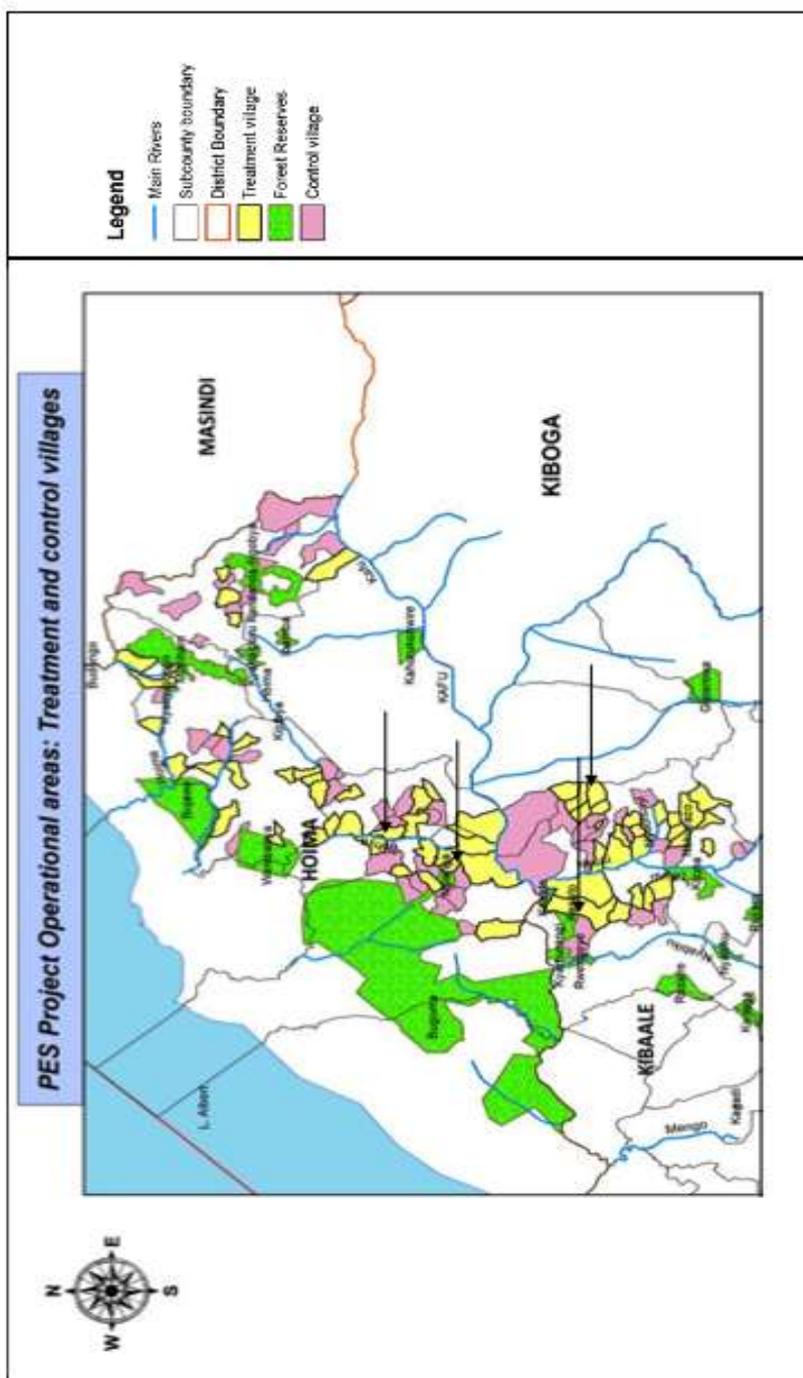
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List of acronyms & abbreviations

Acronym/Abbreviation	Meaning
BD	Biodiversity
BSP	Bali Strategic Plan
CCSP	UNEP Climate Change Subprogramme
CFR	Central Forest Reserve
CoP	Convention of the Parties
CSR	Corporate Social Responsibility
CSWCT	Chimpanzee Sanctuary and Wildlife Conservation Trust
DFO	District Forest Officer
DFS	District Forest Service
ECOTRUST	Environmental Conservation Trust of Uganda
EA	Executing Agency (NEMA)
ENRO	Environment and Natural Resources Officer
EMSP	(UNEP) Ecosystem Management Subprogramme
EO	Evaluation Office
FMP	Forest Management Plan
FSP	(GEF) Full Size Project
GEF	Global Environment Facility
GOU	Government of Uganda
IA	GEF Implementing Agency (UNEP)
IIED	International Institute for Environment and Development
IPA	Innovations for Poverty Action
LD	Land degradation
M&E	Monitoring and Evaluation
MOU	Memorandum of Understanding
MTR	Mid-Term Review
N/A	Not applicable
NAHI	Nature Harness Initiative
NARCG	Northern Albertine Rift Conservation Group
NBSAP	National Biodiversity Strategy and Action Plan
NCE	No Cost Extension
NEMA	National Environment Management Authority
NGO	Non-Governmental Organisation
PA	Protected Area
PES	Payment for Ecosystem Services
PFO	Private Forest Owner
PIF	Project Identification Form
PIR	Project Implementation Review (annual)
PM	Project Manager
PMU	Project Management Unit
PPG	Project Preparation Grant
ProDoc	Project Document
PSC	Project Steering Committee
REDD	Reduced Emissions from Deforestation and Degradation

Acronym/Abbreviation	Meaning
ROtI	Review of Outcomes to Impacts
SDG	Sustainable Development Goal
SFM	Sustainable Forest Management
SLM	Sustainable Land Management
SMART	Specific, Measurable, Attainable, Relevant & Time-bound
TC	(Project) Technical Committee
TE	Terminal Evaluation
ToC	Theory of Change
ToR	Terms of Reference
UCO	University College Utrecht
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UQAM	University of Quebec at Montreal
UWA	Uganda Wildlife Authority
WCS	Wildlife Conservation Society
WWF	World Wide Fund for Nature

Figure 1: General Map of [project location]



Source: PES project. Arrows indicate areas visited during field checks (from north to south: Kizirirumbi, Kapwoya, Kiyanga, Kalandu)

Table 1: Project Identification Table

GEF project ID:	3682	IMIS number:	GFL: 2328-2716
Focal Area(s):	BD2 To mainstream biodiversity in Production Landscapes SP 5 Fostering Markets for Biodiversity Goods and Services	GEF OP #:	3682
GEF Strategic Priority/Objective:	Fostering markets for biodiversity goods and services	GEF approval date:	1 February 2010
UNEP approval date:	10 May 2010	First Disbursement:	25 May 2010
Actual start date:	1 June 2010	Planned duration:	48 months
Intended completion date:	30 April 2014	Actual or Expected completion date:	31 October 2014
Project Type:	MSP	GEF Allocation:	\$870,000
PPG GEF cost:	\$30,000	PDF co-financing*:	\$35,000
Expected MSP Co-financing:	\$1,232,400	Total Cost:	\$2,102,400
Mid-term review/eval. (planned date):	August 2012	Terminal Evaluation (actual date):	June 2015
Mid-term review/eval. (actual date):	January 2013	No. of revisions:	1
Date of last Steering Committee meeting:	21-24 October 2014	Date of last Revision:	11 October 2013
Disbursement as of 30 June 2013:	\$803,107.13	Date of financial closure:	31 December 2014
Date of Completion:	3 May 2014	Actual expenditures reported as of 31 December 2014:	\$ 820,965
Total co-financing realized as 30 June 2013	\$612,710	Actual expenditures entered in IMIS as 31 December 2014:	\$ 625,380.38
Leveraged financing:	\$762,232		

Executive summary

Evaluation background and methodology

1. The Terminal Evaluation (TE) of the Developing an Experimental Methodology for Testing the Effectiveness of Payment for Ecosystem Services to Enhance Conservation in Production Landscapes in Uganda project (hereafter the Project) was undertaken to assess project performance (in terms of relevance, effectiveness and efficiency), and determine the degree of achievement and/or likelihood of outcomes and impacts (actual and potential) stemming from the Project, including their sustainability. The TE took place between May and October 2015, the timing arranged to coincide with the final administrative and financial planning activities to conclude and close the Project.

2. The TE was undertaken as a mix of desk reviews of project documents and other relevant literature and studies, and in-depth interviews (face-to-face, by Skype or telephone, and by email) with UNEP, NEMA, CSWCT, researchers and other local, national and international stakeholders involved in the design, implementation and management of the Project. The Evaluation consultant visited Kenya and Uganda in June 2015 to hold interviews with staff from key stakeholders, including a field visit to the Project area (covers the Districts of Hoima and Kibaale).

Summary of the main evaluation findings

A. Strategic relevance:

3. The Project contributes to the GEF BD and LD Focal Areas, notably through 'Fostering markets for biodiversity goods and services' (BD-SP5) and 'Supporting sustainable forest management in production landscapes' (LD-SP2), and is relevant to UNEP's mandate, policies and programmes, particularly its Ecosystem Management and Climate Change subprogrammes. It is well aligned with Uganda's priorities, in that the Project targets forests between protected areas, which comprise the majority of the country's forest estate, and small farmers, which are a dominant land-owning group. The effectiveness of the PES approach was of particular interest to GEF, and indeed this is the first project within the GEF portfolio to 'test' the PES approach.

B. Achievement of outputs:

4. Most of the outputs were delivered and on the whole delivered well, including the design, set-up and operation of the PES scheme for two years with ecological and socio-economic data collected from 140 villages divided into treatment (PFOs receiving payments for forest management activities) and control (PFOs who received no payments) villages. After outreach in the community, 342 PFOs signed up to scheme of which 262 (76.6%) had met compliance monitoring at the end of the second year, which can be considered a success. Analysis of the research data was largely completed, but additional satellite imagery is needed to further refine the analysis of the extent of deforestation and reforestation that has occurred during the Project. Much useful information, experience and lessons learning has been gathered on the PES scheme (e.g. determining the level of payment, arranging contracts and delivering payments, how to operate community based monitoring, supporting PFOs, and how to integrate research into the design), although this has not been fully captured. There has also been some successful structured capacity building provided through workshops to PFOs, technocrats and the private sector. The Project produced many media articles, reports in partner newsletters or on web, and publications, although the Project's research findings have yet to appear in a peer-reviewed journal.

C. Effectiveness (attainment of project objectives and results):

5. Analysis of the field data suggests that the PES scheme has reduced deforestation and increased reforestation, although the overall difference was fairly small (the rate of deforestation was 1.64 percentage points lower in treatment than in the control villages), which may be partly due to the limited 2-year timeframe, and the results were not statistically significant (due to too low a sample size). Other

(largely qualitative) data confirmed the same trend. However, there was evidence that some of the local PFOs were less inclined to cut down trees in their forest patches anyway ('inframarginality') as they already saw value in maintaining the forests, and the picture was further confused due to a level of 'contamination' of the control groups, many of whom were expecting to join the scheme at some point, so there were weaknesses in the design that undermined the 'experimental' nature of the project.

6. There was considerable interest among PFOs in the treatment group to continue after Project funding ended (92% reporting interest in a similar future scheme), and indeed many continued implementing their management plans (e.g. no cutting of certain sized trees, restricting access to their areas) many months after their last payment. However, PFOs claimed that the payments did not cover the local costs of conserving the forests (opportunity costs and costs from raids by vermin using forest patches as refuges). Non-monetary benefits were also very important, and a major motivational factor, including the perception of increased title to the land (judged on the basis of individual contracts issued as part of the scheme which showed the boundaries of their forest areas), and this combination of financial and non-financial benefits was probably why many stayed with the scheme. However, the scheme did cause some tensions between those receiving payments and those who did not in some villages, particularly over the issue of harbouring vermin, and some PFOs were cautious about joining the scheme.

7. There was a high level of awareness of the importance and value of forest ecosystem services among PFO interviewees, and significant local capacity was built for engaging in PES schemes through the Project, notably through the support of Community Monitors (who also provided unofficial support to the District Forest Office). Some additional technical capacity was built within NEMA, which, along with the Project's results and awareness-raising activities, was considered critical in supporting NEMA's efforts to integrate the PES approach into the revision of the National Environmental Policy and Act, and there are other good opportunities for mainstreaming results into (upcoming) national policy and legislative processes, including the development of a set of (voluntary) guidelines for the design and operation of PES in Uganda to complement the revised Policy and Act. However, mainstreaming into other important sectors, notably agriculture and finance, has been much less successful, and the economic business case for PES for these other sectors still needs to be convincingly made. In contrast, there was no specific capacity building of Ugandans on research methodology or analysis through the Project.

8. One unanticipated but very positive result of the Project that has helped strengthen the institutional framework for PES in Uganda has been the creation of a forum of NGOs and CBOs - the Northern Albertine Rift Conservation Group (NARCG) - which is focused on the conservation of the Northern Albertine Rift region.

9. Disappointingly, there was weak engagement with the private sector in the Project, and the anticipated buy-in by businesses that rely on the ecosystem services provided by the forests in the Project area (e.g. hydroelectric, tobacco, drinks, ecotourism) or international companies interested in carbon credits, did not materialise, and the anticipated Uganda REDD+ programme, to which the Project was expected to link and receive funds from, has yet to become operational. There were a variety of reasons for this, but the Project's perception as essentially a research project did not help, and it is clear that there needs to be a different approach to the private sector, probably with direct GoU involvement, before businesses will adopt PES as an integral part of their business model in Uganda.

10. Judged from the above, the limited ambition of the Project's objective - to simply test a PES approach in the context of the forested area of Western Uganda - can thus be said to have been delivered, although achievement of the Project's stated purpose - to support the GoU by providing empirical evidence regarding the effectiveness of the PES scheme(s) in order to develop a replication strategy for other areas at risk of deforestation and to attract other buyers to participate - is much more debatable.

D. Sustainability and replication:

11. Socio-political sustainability is likely due to the adoption of PES as a model for land use within NEMA and the mainstreaming of PES into national policy and legislation, and there is considerable local interest in continuing with the scheme in the Hoima and Kibaale Districts. However, there are significant concerns over the financial sustainability of the Project's results as there has been no follow-up funding for the scheme to pay those involved to continue or to expand the scheme to include those in the control group who have expressed an interest in joining. Also, the levels of payments in any future scheme would need to be much higher to offset the conservation costs. Essentially the Project's PES scheme has been mothballed, although there have been attempts to raise additional grants to restart it or find alternative finance for the PFOs to keep them interested in the scheme, some of which have been successful..

12. Institutional sustainability is also threatened in that there is no longer any funding for the Community Monitors, which have been an important reason for the successful delivery of the scheme in the field, and there is a high risk that they may disband in the near future. In terms of the research element, sustainability was not considered an issue as the data have been collected and analysed and results reported on in an 'impact assessment report' (so available for use and reference, although not yet published in any peer-reviewed, publically available, journal), and sustainability of the PES scheme itself was not given the attention it should have as the Project was viewed by many as a research project.

Catalytic role and replication:

13. There has been some good evidence of catalysis of Project results, and especially approaches and uptake of lessons learned, such as the design of the PES model for an EU-funded WWF project¹ on sustainable financing for the Rwenzori National Park, Uganda, in 2012/2013. However, as mentioned there has been much less private sector engagement than hoped for, and no catalytic financing (investment from the private sector). There has been little direct replication to date and NEMA has yet to develop a replication strategy as outlined in the Project Document. However, a degree of replication has been achieved through integration of the PES approach into the revised National Environmental Policy and Act.

E. Efficiency:

14. There were no specific cost- or time-saving measures initially proposed for the Project, but the Project built on multiple lessons from several previous and active initiatives focused on PES/sustainable development/rural development/poverty alleviation issues in the target region and more generally in Uganda. Importantly, the Project built on a collaboration between several partners, all of which brought specific expertise/knowledge/skill sets to the Project, and was able to build on well-established institutional relationships and local structures). These helped to keep Project start-up and running costs low, and presented additional opportunities to raise awareness and promote the mainstreaming of the Project results more widely.

F. Factors affecting project performance:

15. The Project has suffered from a confused casual logic and weak design, with focus on activities and outputs rather than outcomes (a reflection that the Project was designed as both a research project and a development project, with the former focused on output level and the latter more on the outcome level). Project preparation was generally well organized and the design of the data collection was considered robust with a well-designed econometrics data collection scheme. However, there were recognised weaknesses in the project design and operation e.g. the distance between treatment and control villages (too close to guarantee independence), the approach used to calculate the payments to the PFOs (complex and widely considered unsatisfactory) and the permitted off-take of some size classes of trees in the forests (according to some interviewees this can undermine forest regeneration and it is unclear whether the level would be sustainable, although this view was disputed by others). There had been some informal technical

¹ The WWF project integrated PES policy development as one of key outputs and has appointed CSWCT and NEMA to be part of its steering committee.

guidance on the Project's design by a member of STAP. However, the main technical review of the Project at the design stage was limited to the UNEP's Project Review Committee (PRC), none of whose members had sufficient research design background, and there was no independent review of the design of the research element of the Project at the design stage by independent researchers/academics

16. Project execution arrangements were clearly identified in the ProDoc with separate partners with well-defined roles and responsibilities (judged a strength of the Project) in relation to project management, impact monitoring, payments to PFOs, and compliance monitoring. The Project has been generally very well managed and administered by the PMU and CSWCT. The Project team has proved very competent and the international research team showed strong commitment, and both deserve credit for their efforts and success. However, the decision to increase the number of villages to be included in the Project from 80 to 140 taken at the first PSC meeting/inception workshop without immediate additional funding to compensate the significantly increased workloads created tensions between partners. In addition, important co-financing from NEMA and a private sector partner (Hydromax) was not delivered which further increased demands on the Project Management Unit and the CSWCT.

17. One of the most significant challenges for the project management team was managing and coordinating the activities and inputs of such a large group of project partners operating at different levels (global, national and local) with different priorities and expectations. Unfortunately, unlike the other partners there was no MoU between the international research team and NEMA which meant that lines of authority and decision-making within the Project's hierarchy were not always clear. In addition, there was failure of proper accreditation of the role and involvement of national partners in the 'impact assessment report' and the ownership of the research data (held by different partners) needs to be agreed and clarified.

18. Initially, national ownership was high as the drive behind the original project concept came from the CSWCT and NEMA who were looking to fund a proposal for a PES scheme in the Hoima region. However, after the Project was introduced to UNEP and discussed with the GEFSEC, its primary focus became research. Although the Project's PIF was endorsed by the Government of Uganda (confirmed by the endorsement letter from Uganda's GEF Operational Focal Point), differences of opinion on the overall direction and balance between the research element and PES scheme developed between project partners. This and a later decision to increase the number of villages to be included in the field sample, which required greater resources for the research element with increased workload for all partners led to a division between those focused on the PES scheme (NEMA, CSWCT, NAHI, IIED) and those on the research element of the Project (international research team, UNEP), with a split between partners creating two 'camps' within the Project. Although relationships between the two groups have improved over the course of the Project, they continued to exist to some extent even at the TE stage.

19. The Project's communication activities have been generally very successful, and the Project has produced many articles and presentations over its lifetime. This has probably had the greatest effect at the local level, where knowledge of the value of the forests for ecosystem services and opportunities offered by the PES approach is clearly high. However, the Project has had poor linkage with other relevant GEF-funded projects, even, surprisingly, with projects focused on PES being managed by UNEP from Nairobi, and the Project is not well known within UNEP.

20. The project's M&E system followed UNEP's standard monitoring and evaluation procedure, although it suffered from a weak design (e.g. non-SMART indicators and targets with lack of quantitative baselines). Reporting requirements were largely fulfilled throughout the Project.

21. Given the above, and that this was (apparently) the first major research-focused project managed by UNEP within its GEF portfolio and so was considered 'innovative' and very much a lesson-learning exercise, overall, the Project was rated as **Satisfactory**.

Table 2: Summary of Evaluation Ratings

Criterion	Overall Rating
A. Strategic relevance	Highly Satisfactory
B. Achievement of outputs	Satisfactory
C. Effectiveness: Attainment of objectives and planned results	Moderately Satisfactory
1. Achievement of direct outcomes as defined in the reconstructed TOC	Satisfactory
2. Likelihood of impact using ROTl approach	Moderately Likely
3. Achievement of formal project objectives as presented in the Project Document.	Moderately Satisfactory
D. Sustainability and replication	
1. Socio-political sustainability	Moderately Likely
2. Financial resources	Moderately Unlikely
3. Institutional framework	Moderately Likely
4. Environmental sustainability	Moderately Likely
5. Catalytic role and replication	Satisfactory
E. Efficiency	Satisfactory
F. Factors affecting project performance	
1. Preparation and readiness	Moderately Satisfactory
2. Project implementation and management	Satisfactory
3. Stakeholders participation, cooperation and partnerships	Moderately Satisfactory
4. Communication and public awareness	Satisfactory
5. Country ownership and driven-ness	Moderately Unsatisfactory
6. Financial planning and management	Satisfactory
7. Supervision, guidance and technical backstopping	Satisfactory
8. Monitoring and evaluation	Moderately Satisfactory
i. M&E design	Moderately Satisfactory
ii. M&E plan implementation	Satisfactory
Overall project rating	Satisfactory

S=satisfactory; MS=moderately satisfactory; MU=moderately unsatisfactory; With respect to Sustainability: ML=Moderately Unlikely

Summary of recommendations and lessons learned

The following is a summary of the main recommendations that have been generated from the evaluation findings:

	Recommendation #1
Context:	The analysis of the spatial data to date has provided inconclusive results and a more detailed analysis is needed in order to gain greater certainty over the degree of reduction in deforestation and improvement in regeneration due to the PES scheme.
Recommendation:	It is recommended that the analysis of the spatial data is fully completed. Other data sets, such as the biodiversity monitoring data held by NAHI, and data sets held by CSWCT should also be fully explored. In addition, it is recommended that a costs-benefit analysis of the scheme, e.g. costs/hectare of (the marginal) reduced deforestation achieved through the scheme, is undertaken as this would be valuable for comparison with alternative biodiversity conservation approaches including other types of PES schemes.
Responsibility:	International research team to raise the funds, with UNEP and GEF providing support in identifying the additional funds needed, and research team to complete the analysis, with support from NEMA and CSWCT.

Time-frame:	Before end of July 2016
Recommendation #2	
Context:	Not all the experiences and lessons learned have been fully captured by the Project team and reported on (for instance lessons from undertaking the research element are lacking which could inform other GEF-funded research-focused projects), and there is still much information that could be useful to other groups considering or implementing PES schemes in Uganda.
Recommendation:	It is recommended that a 1-2 day structured lesson-learning workshop is organised with leading partners (CSWCT, NEMA, PFO groups, researchers, IPA, NAHI) and other interested parties such as UNDP and IUCN, to review and fully capture the wide range of results, experiences and lessons learned from the PES scheme and research element, covering their design, establishment and operation, as well as lessons from attempts to assess its effectiveness and impact and integrate research as a key element into GEF projects. A key deliverable should be a specific publication (case study) to promote the Project's findings more widely and facilitate their uptake by others.
Responsibility:	CSWCT, NEMA, international research team, PFO groups from Hoima and Kibaale, independent facilitator, associated project partners, and with (non-financial) support from UNEP (ESEU, DEPI). The private sector partners involved in the Project expressed an interest in providing some co-financing for this deliverable and should be approached for funding for the event, e.g. Tullow Oil and Hydromax.
Time-frame:	Before end March 2016
Recommendation #3	
Context:	Sustainability and the fate of the participants after the GEF funding finished was not given sufficient consideration as the Project was seen as a research project (therefore did not need it), by some involved groups.
Recommendation:	It is recommended that all UNEP GEF projects that are orientated towards research have an assessment of the likely impact of the research element on the target audiences undertaken as part of the approval process (and the project design modified accordingly).
Responsibility:	UNEP PRC, with additional input from relevant external experts as required.
Time-frame:	Any future UNEP GEF projects that include significant research element.
Recommendation #4	
Context:	The Project was unable to secure any sustainable financing from private sector buyers of ecosystems services provided by the forests in the target area. Certification of these forests under the Plan Vivo scheme would make them more attractive to buyers in the voluntary carbon markets.
Recommendation:	It is recommended that the CSWCT and NEMA seek certification of the PES scheme under the Plan Vivo scheme, which would substantially improve the chances of accessing the voluntary carbon markets. It is also recommended that if the CSWCT and NEMA partner with other groups with more experience of PES schemes, such as Ecotrust (which advises government of Uganda on PES) to put in a joint application to Plan Vivo with Ecotrust taking the lead on the carbon component.
Responsibility:	CSWCT, Ecotrust, NEMA, PlanVivo Foundation.
Time-frame:	By end of March 2016
Recommendation #5	
Context:	There has been no direct follow-up funding for the scheme, including for the Community Monitors which are continuing to work on a voluntary basis with the PFOs. However, this is not sustainable and there is a risk they will disband, after which it would be

	difficult/take considerable time to establish a new group, which would handicap any efforts to restart the PES scheme or begin a new initiative.
Recommendation:	It is recommended that some emergency funds are found for at least the next six months to ensure that the system of Community Monitors does not disband. Community monitors need to be paid a retainer fee whilst new funding is procured (if the PES scheme is to be reestablished).
Responsibility:	CSWCT, NEMA.
Time-frame:	Within three months of closure of the Project

Recommendation #5	
Context:	Sustainability of the Project results was insufficiently considered and this has left a group of people – the PFOs who received payments – with no follow-up financing, as they cannot link with buyers of ecosystem services themselves directly. Although at the design stage, it was expected that the project would have strong buy-in from the private sector for ecosystem services provided by the PFOs this did not happen and financial sustainability was not viewed as important by the UNEP TM and other partners because the Project was seen as essentially a research project that once it had collected and analysed the necessary data provided answers to the research questions would be essentially finished. There was no specific sustainability or exit plan produced for the final year of the project.
Recommendation:	GEF projects that are orientated to research need to consider what happens to any research subjects, who may have taken risks to become involved and made significant changes to their lives, after the project finishes, as issues of sustainability and longer-term impact cannot be ignored. It is recommended that all future GEF projects need to have a clear sustainability and exit strategy and plan that sets out clearly what should/is likely to happen to project participants once GEF funding is finished even if they are research-focused projects. This should be produced during the final year of the project and this is included as part of the Project's final report to UNEP/GEF and signed off by the UNEP TM.
Responsibility:	UNEP-GEF Project Managers and UNEP Task Managers
Time-frame:	In last year of GEF project

Recommendation #6	
Context:	There were criticisms over the poor involvement of national researchers in the Project's research, ownership of research data and the poor crediting of partners in publications and reports by the international research team, and questions were raised over research permits.
Recommendation:	It is recommended that both GEF and UNEP establish a code of practice and guidelines for research within GEF projects, including guidance/best practice on how non-national researchers should undertake research within a country, how they should collaborate with national partners and researchers, e.g. permits, co-financing of nationals, MoUs, authorship of publications, consultation/negotiation structures for agreeing on research, etc, as well as guidance on ownership of any data and field samples. Within UNEP, this should be a generic guidance document produced by the GEF coordination unit and used by the PRC as a checklist at project design and later by the individual TMs to ensure researchers were acting appropriately. The current UNEP PCA template could be modified to include a clause that stipulates that the same ownership and copyright clauses should be included in both primary contracts with executing bodies and with any groups they sub-contract to carry out tasks for the Project.
Responsibility:	GEFSEC, UNEP, including EMSP Coordinator and GEF Unit.
Time-frame:	During design of any future GEF projects that include significant research element and

includes non-national researchers

Recommendation #7	
Context:	There has been little linkage between the Project and other UNEP projects with a focus on PES or ecosystem services, and no direct sharing of experiences and lessons learned despite obvious opportunities for the Project and other individual projects to benefit.
Recommendation:	It is recommended that a review of all PES and ecosystem services valuation projects in UNEP's portfolio (both GEF and non-GEF funded) is undertaken to draw out common experiences, good practices and lessons learned, to identify what worked and why and (as important), what didn't and why. This should result in a specific publication.
Responsibility:	ESEU, other relevant units in DEPI, UNEP GEF Coordination Office, GEF Task Managers and individual project managers, and coordinated by the EMSP Coordinator at UNEP.
Time-frame:	By March 2016

Recommendation #8	
Context:	The current version of the 'impact assessment report' is too technical and not in a suitable form for policy makers, conservation practitioners or the general public.
Recommendation:	It is recommended that the results and conclusions from the analysis of the research data are summarized in a 2-4 page policy briefing document that also sets the results in the policy context (perhaps written by someone with experience of developing policy papers for government), and also produced in the form of a 2-4 page summary sheet for conservation practitioners and a general audience (written by a journalist or someone skilled in writing technical briefs for a general audience).
Responsibility:	International research team, CSWCT, NEMA, professional writer
Time-frame:	After revision and updating of the 'impact assessment report', following completion of all data analysis

The following is a summary of the main lessons that have been learned from the Project's successes and challenges:

Lesson # 1	
Finding:	Due to the need to increase the number of villages after the first PSC meeting, only a relatively short period was allowed for awareness-raising and outreach about the scheme in the target areas and for potential participants to consider draft contracts and the associated management plans for their forest patches. As a result, sign up was relatively modest.
Lesson:	In establishing a PES scheme, an adequate sensitization and negotiation period (suggested 3 months) needs to be allowed to ensure people are given the chance to participate, and time to consider what is being proposed and to discuss with their families, and there needs to be adequate funds to ensure their involvement in this process.
Application:	PES design and implementation teams

Lesson # 2	
Finding:	PFOs recognised many other non-monetary benefits from the PES scheme. For instance, many of the PFOs interviewed stated that a major benefit was gaining increased 'ownership' to the land through the process of arranging the contract system for payments, which had a forest management plan that delineated the boundaries of their

Lesson:	land. These non-monetary benefits seem to be one of the main reasons that the PFOs signed up the scheme and stayed with it. Although financial payments are important, landowners can value other less direct and non-monetary benefits. The importance of these additional benefits should not be underestimated and should be fully explored, with mechanisms to maximize other benefits considered during the PES scheme's design phase
Application:	PES design and implementation teams

Lesson # 3	
Finding:	The PES scheme had some unexpected negative consequences including tensions between neighbours over crop raids by vermin suspected as coming from the forest patches being maintained by the PFOs. There was also some exclusion of individuals who did not own forest but previously relied on traditional rights for access to water, fuelwood, food and other important non-timber resources.
Lesson:	PES schemes can have unintended consequences that can create social problems and divisions which if not addressed can lead to increased local poverty, deprivation, inequality and social tensions within the target community.
Application:	PES design and implementation teams

Lesson # 4	
Finding:	The Community Monitoring network was one of the key reasons why the scheme was delivered so well in the field. Monitors were established within the community and interacted directly with the PFOs providing help and support on many aspects of the scheme, including explaining contracts and management plans and giving advice on seedling planning and maintenance.
Lesson:	Establishing a network of locally based Community Monitors to provide compliance monitoring and extension support for a PES scheme can help establish and maintain strong relationships with the local community, which helps to keep PFOs interested and committed. Having the trained Community Monitors based and operating locally also means that the project management has a regular presence in the communities which helps build trust in a project
Application:	PES design and implementation teams

Lesson # 5	
Finding:	Private sector engagement with the Project was poor right from the start, in part because there was little detailed analysis of the business community (or experience of it within the project design team).
Lesson:	When designing a PES scheme it is important to have a very good understanding of the market for the services being addressed through the scheme, the potential to attract buyers, and to understand how to influence and link with them. Potential buyers also need to be involved from the early stages of PES scheme design (and ideally commit for a significant period, say 5-10 years) or sustainability will quickly become a problem
Application:	PES project design teams

Lesson # 6	
Finding:	The local conservation costs were reportedly often higher than PFOs payments. This led to: a) some potential PFOs not signing up to the scheme (although there was interest); b) a degree of unhappiness about the payments during implementation of the scheme; and c) hesitation about whether they would join a similar scheme if the payments were set at the same level. Also, PFOs commented that these costs change and this needs to be allowed for.

Lesson:	Payment modalities for PES schemes need to fully consider opportunity costs such as the rental value of land for agriculture, as well as inflation costs and costs due to any increased damage from vermin resulting from maintaining forest refuges, in order to attract and retain landowners to the scheme. These need to be reviewed and revised regularly (3-6 monthly) to ensure that payments are competitive compared with other land uses. Also, identification of such costs need greater input from the locals.
Application:	PES project design and implementation teams

Lesson # 7	
Finding:	There was an inadequate project budget for face-to-face meetings between the Ugandans and those based internationally, which meant that misunderstandings developed, which could perhaps have been avoided if communication had been better with more opportunities to meet, especially at the critical early stages of the project.
Lesson:	It is important that there are sufficient (financial) resources to allow the different constituencies in a project – in this case research and biodiversity conservation/development - to be able to meet face-to-face, especially where the design of a project is particularly innovative and untested, such as this one, in order to build and maintain a common vision of the Project, understanding of each partner’s position and needs (as these are often very different), and trust between the groups involved. Without these, disagreements and misunderstandings can result which can reduce the potential for successful delivery of a project.
Application:	UNEP and GEF for future projects

Lesson # 8	
Finding:	There was insufficient project funding, especially after the sample size was increased to 140 villages following the first PSC meeting to ensure a sufficiently large sample size for statistical analysis, to properly carry out the scheme or the research, and the costs of the research had been underestimated (especially the costs of the satellite data). Given this was the first time a PES model had been considerably tested using a rigorous experimental statistical approach this is perhaps not surprising.
Lesson:	Using a randomised experimental design, with treatment and control groups, to test a PES scheme in the field requires a large sample size to increase the likelihood of being able to answer the research question(s) posed – in other words, there is sufficient statistical power to detect significant differences). Consequently, the budget for this type of field research can be very high. Given that funding from GEF is limited , especially for MSPs, GEF may not be the most appropriate body for funding field research involving many communities and covering large areas and with complicated logistics.
Application:	UNEP and GEFSEC when considering future GEF projects

1 INTRODUCTION

1.1 Subject and scope of the evaluation

22. In line with the UNEP Evaluation Policy², the UNEP Evaluation Manual³ and the Guidelines for GEF Agencies in Conducting Terminal Evaluations⁴, the Terminal Evaluation (TE) of the Project '*Developing an Experimental Methodology for Testing the Effectiveness of Payment for Ecosystem Services to Enhance Conservation in Production Landscapes in Uganda*' (hereafter termed the Project) is undertaken to assess project performance (in terms of relevance, effectiveness and efficiency), and determine the degree of achievement and/or likelihood of outcomes and impacts (actual and potential) stemming from the Project, including their sustainability.

23. The TE took place between 27 April and 11 December 2015 (see Annex 1), the timing arranged to coincide with the final administrative and financial planning activities to conclude and close the Project.

1.2 Evaluation objectives

24. The TE has two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP, the GEF and the Project's executing partners NEMA and CSWCT and other relevant project partners and interested stakeholders. In doing so the TE aims to identify lessons of operational relevance for future project formulation and implementation.

25. The TE assessed the Project with respect to a minimum set of evaluation criteria grouped into four categories (see below), according to the respective evaluation guidelines of GEF and UNEP (see above). All evaluation criteria were rated on a six-point scale, except for complementarity of the project with the UNEP strategies and programmes which was not rated.

- i. **Attainment of objectives and planned results.** This comprises an assessment of the achievement of the Project's objectives, outcomes and outputs and the Project's relevance, effectiveness and efficiency. Given the Project's expected long-term impacts, a Review of Outcomes to Impacts (ROtI) method was applied to identify whether or not the necessary preconditions, factors and elements needed to support achievement of long-term impacts have been put in place.
- ii. **Sustainability⁵ and catalytic role.** This focuses on the (i) socio-political, (ii) financial, (iii) institutional and (iv) environmental factors affecting the sustainability of project outcomes and results, and also assesses efforts and achievements in terms of replication and up-scaling of project lessons and good practices.
- iii. **Processes affecting attainment of project results.** This covers: (i) project preparation and readiness, (ii) implementation approach and management, (iii) stakeholder participation and public awareness, (iv) country ownership/driven-ness, (v) financial planning and management, (vi) UNEP supervision and backstopping, and (vii) monitoring and evaluation (M&E).
- iv. **Complementarity with the UNEP strategies and programmes.** The TE also presents a brief narrative on: (i) how the Project relates to and links with UNEP's Medium Term Strategy 2010-2013; (ii) how it

² <http://www.unep.org/eou/StandardsPolicyandPractices/UNEPEvaluationPolicy/tabid/3050/language/en-US/Default.aspx>

³ <http://www.unep.org/eou/StandardsPolicyandPractices/UNEPEvaluationManual/tabid/2314/language/en-US/Default.aspx>

⁴ http://www.thegef.org/gef/sites/thegef.org/files/documents/TE_guidelines7-31.pdf

⁵ In the context of the TE, sustainability is understood as the likelihood of continued benefits after the Project ends.

aligns with the Bali Strategic Plan (BSP); (iii) the extent to which the Project considers gender in its design, implementation, and monitoring activities; and (iv) examples of South-South cooperation that the Project has engaged in.

1.3 Evaluation approach and methodology

26. The TE was conducted by an independent consultant with expertise in natural resource/forest management, PES schemes, and project management and M&E (including UN and GEF project experience – see Annex 6), under the overall responsibility and management of the UNEP Evaluation Office (EO), in consultation with the UNEP GEF Coordination Office and the UNEP Task Manager at UNEP (all based in Nairobi).

27. The TE was undertaken using a participatory approach whereby key stakeholders were kept informed and consulted throughout the evaluation process. Both quantitative and qualitative evaluation methods were used as appropriate to determine project achievements against the expected outputs, outcomes and impacts. Information was triangulated (i.e. verified from different sources) to the extent possible, and when verification was not possible, then a single source is mentioned in this report.

28. The TE was undertaken as a mix of desk reviews, in-depth interviews (face-to-face, by skype or telephone, and by email) with staff from the Government of Uganda's (GoU) National Environment Management Authority (NEMA), CSWCT and the International Institute for Environment and Development (IIED) and other Project partners that have been involved in the design, implementation, management and supervision of the Project and other selected national and local level individuals and groups, including representatives from the District authorities, Private Forest Owners (PFOs), and the private business sector in Uganda that have participated in the Project.

29. The findings of the TE were based on the following:

(a) A **desk review** of project documents and others that included:

- Relevant background documentation, *inter alia* UNEP and GEF policies, strategies and programmes pertaining to PES, Sustainable Forestry Management (SFM) and forest biodiversity conservation;
- Project design documents, including those related to the Project Identification (PIF) and Project Preparation Grant (PPG) phases;
- Project reports such as progress and financial reports from NEMA and CSWCT to UNEP;
- Project Steering Committee and Technical Committee meeting minutes; annual Project Implementation Reviews (PIRs), and revisions to the logical framework;
- Project audit report(s), Annual Work Plans and budgets or equivalent and revisions to project financing;
- GEF Tracking Tools;
- Project documentation related to its activities, outputs and deliverables such as the Communication Strategy, media articles, Project newsletter, information on the Project on the internet, and other communication products; and
- Other relevant Project correspondence.

(b) **Interviews** with priority stakeholders included:

- The Project Manager and other project management and execution support staff at the Chimpanzee Sanctuary and Wildlife Conservation Trust (CSWCT), National Environment Management Authority (NEMA) and the International Institute for Environment and Development (IIED);
- Individuals that were involved in the project design and implementation;

- A selection of the Project's partners and stakeholders, including from Innovations for Poverty Action (IPA), Nature Harness Initiative (NAHI), the international research team, and participants in the Project's target area;
 - Members of the Project Steering Committee (PSC) and Technical Committee (TC);
 - UNEP Task Manager (TM) and Fund Management Officer (Nairobi), as well as former TMs previously involved with the Project; and
 - Representatives of other relevant stakeholder and donor organisations, with an interest in PES and ecosystem services.
- (c) **Field visits.** A field mission was undertaken in June 2015 to interview key individuals at UNEP Headquarters in Nairobi in Kenya, and Project partners organisations in Kampala and Entebbe including NEMA and CSWCT, as well as a 4-day field visit to interview local and District participants in the pilot scheme in the Hoima and Kibaale districts, including interviews with PFOs from both treatment and control groups, and to ground truth results given in project reports in the field.

30. Limitations. It was not possible to interview every possible stakeholder group and individual due to financial and time constraints. However, all the major groups were included apart from the local communities in the district of Kibaale whose interviews had to be cancelled due to the consultant falling ill on the day scheduled for the meetings (there was no other opportunity to interview these and skype or telephone interviews with the groups in Kibaale were not considered practical). It was also not possible to arrange interviews with some stakeholders or individuals as they were unavailable during the evaluation period, notably the UNEP FMO, Director of the Uganda Wildlife Authority (UWA), members of the Katoomba Group involved with the Project, and the Director of Ecotrust. Efforts were made to include as many women among the interviewees as possible, but unfortunately relatively few women could be interviewed in the target area as interviews took place during the day when most of the women were busy with their families.

31. A list of the people interviewed and data/information sources consulted in the preparation of this report is given in Annexes 4 and 5 respectively.

1.4 Main evaluation criteria and questions

32. An evaluation matrix presenting broad categories of areas to be addressed and key sample questions to be asked during the evaluation process, with sources of data and information and the methods by which these would be gathered, was compiled and approved during the TE's inception period (set out in an Inception Report [an internal document submitted to the UNEP EO] produced in May 2014). The questions in the evaluation matrix served as guides in directing the semi-structured interviews (not as a formal questionnaire) and only questions relevant to each stakeholder were asked.

33. Following agreement with the UNEP EO on aims and methodology, the TE focused on the following sets of key questions, to assess project performance and determine outcomes and impacts, and evaluate likely sustainability:

- a. How and to what extent did the Project succeed in providing evidence of the effectiveness of payment scheme(s) to a) reduce deforestation and biodiversity loss and b) cover local costs associated with maintaining biodiversity?
- b. To what extent has the Project increased the number of national and community stakeholders who understand the design and implementation of PES scheme using a randomized experimental design?

- c. Was the Project's focus on research appropriate in terms of helping to deliver GEF and UNEP biodiversity aims and goals? What were the challenges/lessons learned in having a research focus in a GEF biodiversity project?
- d. How and to what extent did the Project produce lessons which are applicable to follow up projects and similar initiatives? Is there any evidence of these lessons having been taken up by other projects and initiatives?
- e. What are the main challenges to continuation of the PES scheme?
- f. To what extent did the Project succeed in coordinating its work with other GEF and non-GEF initiatives as listed on page 17, paragraph 39 of the project document?

34. In attempting to attribute any outcomes and impacts to the Project, the TE considered the difference between '*what has happened with*' and '*what would have happened without*' the Project (the counterfactual). In addition, as this is a TE, particular attention was given to capturing lessons learned from the Project's experiences. Consequently, the TE has sought to go beyond the assessment of "*what*" the Project's performance was, to provide a deeper understanding of "*why*" the performance was as it was, i.e. assessment of processes affecting attainment of project results, in order to provide the basis for lessons that can be drawn from the Project.

35.

2 PROJECT BACKGROUND

2.1 Context and development

36. Deforestation, unsustainable logging, human encroachment, the bushmeat trade and high human population growth all threaten forest biodiversity in Uganda. The problem is particularly acute outside of protected areas (PAs) on private and public/communal forested lands that are not regulated or managed by government, which represent around 70% of the country's total forested land. Communities living in these forests depend on their resources for their livelihoods including firewood, building materials, and medicinal plants but are faced with more immediate livelihood needs, which leads to over-exploitation. At the time of Project's design (2008-2009), around 50% of all the tropical high forest on private land in Uganda was degraded, compared with only 15% in officially protected forest reserves.

37. Although the loss and degradation of its forest areas threatens all of Uganda's forest biodiversity, there is particular concern over the country's remaining population of chimpanzees (*Pan troglodytes*). This is estimated at around 5,000 individuals, most of which are confined to the forests of Western Uganda. Clearing of forests for cash crops, conflicts with farmers, and in-migration of people from other areas of Uganda⁶, are threatening the survival of these chimpanzees, and risk isolating the populations in the remaining forest reserves, halting natural inter-breeding between different populations. Apart from their biodiversity value, the loss of these forests is also threatening other ecosystem services, particularly carbon storage and provision of clean and reliable sources of water on which both people and businesses depend.

38. Consequently, there is a need to develop incentive schemes to encourage local farming communities and private forest owners (PFOs) to view conservation of forest biodiversity as essential to support their livelihoods rather than as a threat or impediment. The Payment for Ecosystem Services (PES)⁷

⁶ Particularly continuing in-migration by people from the South-west of Uganda as agricultural land in that region has become exhausted.

⁷ The STAP of the GEF defines PES as (i) voluntary, (ii) contingent transactions between (iii) at least one seller and (iv) one buyer (v) over a well-defined ES, or a land use likely to secure that service (<http://stapgef.unep.org/docs/Guidance/PESGuide.pdf>). This project uses this simple five-

approach offers one potential solution, which has been heavily promoted by conservation practitioners. However, there is still a lack of evidence on the effectiveness of the PES approach to generate both biodiversity and socio-economic benefits, that is robust enough to convince policy makers, businesses and local communities to adopt and promote the model (even among those businesses reliant on ecosystem services for their source materials e.g. water for hydroelectric power generation). According to the project document (ProDoc), companies are unsure what benefits they derive and what they should pay for, and the Project argues that providing such information could help to change their attitudes and behaviours towards the forests, generate greater commitment and investment from the private sector (from both buyers and providers to protect ES).

2.2 Project Objectives and Components

2.2.1 Objectives

39. According to the ProDoc, the Project's **purpose** was to support the Government of Uganda (GoU) in producing empirical evidence on the effectiveness of the PES scheme(s) in order to develop a replication strategy in other areas of the country at risk of deforestation and to attract other buyers to participate, and. Its overall **goal** was the enhancement of Biodiversity Conservation in Production Landscapes in Uganda⁸ and globally through better understanding of Payment for Ecosystem Services.

40. The Project's **objective** was to 'test the effectiveness of PES as a viable means for financing and procuring biodiversity conservation outside protected areas in Uganda using an experimental methodology'. However, in reality the Project had two main and distinct but parallel and interrelated objectives, which reflect the way the Project was developed (see section 2.14.1). The first of these (the original project objective) aimed to develop and pilot a PES scheme to create incentives for local communities in (initially) the Hoima District (and later Kibaale District) in Western Uganda to conserve and restore forest habitats important for chimpanzees and other forest biodiversity that would at the same time deliver other environmental, social and economic benefits and make forest conservation a livelihood opportunity for local communities.

41. The second aim (added in a little later during project concept (PIF) phase – see section 2.14.1), was to test the PES approach (as designed and in the specific context of the Project area) to determine whether it was an effective means for financing and securing forest biodiversity conservation outside PAs, using an 'experimental' design that would allow comparison of changes in ecological, social and economic metrics over time between randomised 'treatment' and 'control' groups.

42. Confusingly, the Project's title - Developing an Experimental Methodology for Testing the Effectiveness of Payment for Ecosystem Services to Enhance Conservation in Production Landscapes in Uganda - suggests that the aim of the Project is to develop a methodology for testing PES schemes, rather than testing the PES scheme itself (aim 2 above) or delivering the PES scheme (aim 1).

2.2.2 Components

43. The ProDoc describes four project Components. The first three were intended to be 'technical components' with the fourth dealing with project management - Piloting of the PES scheme based on an experimental methodology (Component 1); strengthening local institutions' scientific and monitoring programs and capacity to design and implement PES schemes (Component 2); Generating, disseminating, and replicating good practices (Component 3); and Project Management (Component 4).

criteria definition provided by the STAP paper, which is the definition used by this project. The core emphasis lies in criterion (ii): conditional, *quid pro quo* transactions where payments are made if and only if the agreed-upon ES are provided.

⁸ This corresponds to the GEF Biodiversity Focal Area Strategic Priority II.

Component 1 - Piloting of PES scheme(s) based on experimental methodology

44. The main purpose of Component 1 was to both establish and test the PES scheme and the bulk of the Project's activities and budget are associated with this Component. According to the Project's logframe, the intended 'outcome' of this component was statistically robust evidence of the effectiveness of such payment scheme(s) to: (a) reduce deforestation and biodiversity loss and (b) cover local costs associated with maintaining biodiversity.

45. Various sets of ecological and socio-economic data were collected by two project partners (NAHI and IPA) at baseline (2010/2011), mid (2012) and end (June-Dec 2013) points. Ecological data included use of remote sensing and satellite images as well as direct forest and biodiversity measurements. Data were then analysed by a team of US-based researchers.

Component 2 - Strengthening technical and institutional capacity to design, implement and monitor PES schemes

46. This Component aimed to train local resource users in forest/land management practices to maximize biodiversity maintenance (which were needed to deliver PFO contracts related to the delivery of the PES pilot under component 1 above). Also, PES monitoring schemes were to be established and national and local partners trained to oversee the maintenance of biodiversity and payment compliance (although the latter is more appropriately treated as part of Component 1 since it is tied to the delivery of the PES scheme).

47. In addition, training courses on PES for decision-makers and technical staff in government, academia, and Non-Governmental Organizations (NGOs) were planned, including training on methods of valuation and conditionalities of different payment schemes. The main outcome of this component was intended to be an increased number of national and community level stakeholders (from diverse sectors and strategically placed institutions) who could design and implement PES schemes.

Component 3 - Generating, developing and disseminating a replicable PES model (s) based on lessons learned and best practices

48. This Component aimed to identify lessons learnt from the Project 'through a rigorous monitoring and evaluation strategy'. It also intended to identify sites for possible replication and options to disseminate the lessons and results of the Project. Key outputs of this component were to be a communication strategy and 'a marketing package for carbon trade and biodiversity conservation services for potential PES buyers', as well as a substantial number of technical and scientific publications.

Component 4 – Project management

49. This component focused on the Project's management structure and activities⁹. Monitoring and evaluation (M&E) activities, which are part of project management activities, were originally included within Component III but most moved with their associated budgets to this Component following recommendation by the Mid Term Review (MTR).

50. The Project's logical framework is presented in Table 3. This is the latest, updated version, modified following minor updating based on recommendations from the PSC after the first PSC meeting/inception workshop and following the MTR report.

General points on project design

⁹ However, as the project management is a means to an end and not an outcome in itself and there should have been no outcomes or indeed component associated with project management in the logframe.

51. The TE was not requested to evaluate the design of the experimental research element of the Project in detail or the appropriateness of the statistical methods used to analyse the data (or the detailed results of the statistical analysis) – these are discussed in the final ‘impact assessment’ report produced by the team of international researchers¹⁰. Rather the TE (as per its Terms of Reference – see Annex 1) focuses on the design and implementation of the GEF project, the extent to which the Project has made an impact and its results are sustainable, and whether the GEF funding was utilized correctly and efficiently. However, a number of general points on the research design, highlighted by interviewees, which impacted the delivery of the results, are worth making here.

52. The Project was designed to allow comparison of a ‘treatment group’ of PFOs who were paid (cash and in-kind, e.g. provision of seeds, equipment, etc) for carrying out various forest management activities, with a ‘control group’ of PFOs who received no payments. Contractually agreed forest management activities could include actively patrolling forest areas against indiscriminate logging and charcoal collectors, planting of indigenous tree species, or leaving land undisturbed for natural regeneration to take place (e.g. leaving specific riverine areas uncultivated). The intention was that the (unpaid) ‘control group’, who were not expected to undertake conservation activities, would help to establish the ‘counterfactual state’ of what would have occurred in the absence of the PES scheme.

53. This ‘experimental methodology’ was considered innovative in terms of GEF PES projects at the time when the Project was designed. Previously, GEF-funded PES projects (if tested at all) had simply made direct ‘before’ and ‘after’ (project) treatment comparisons so were subject to external, non-project factors influencing the results and complicating the interpretation of the effectiveness of the PES model as a conservation/development tool.

54. The research model assumed that there were no other forest conservation-orientated projects working with either of the ‘treatment’ and ‘control’ group of villages that might bias the comparison, and that the randomly selected control villages were situated far enough from the treatment villages not to be at risk of ‘contamination’ by activities being undertaken in the treatment villages (in other words the treatment and control villages were assumed to be completely independent of each other). It was also assumed that previous exposure and receptivity to the forest conservation ‘message’ (prior to the Project) was uniform across the treatment and control villages. The Project chose target communities based on baseline information on deforestation levels and areas at risk of deforestation, forest use, and local institutions governing forest management (collected during the PPG stage), and then randomized the participants into treatment and control groups. Various ecological, socio-economic and land use impact indicators were to be measured, including: (i) a variety of forest conservation indicators such as tree coverage and forest use; (ii) associated biodiversity and ecosystem service indicators, including changes in chimpanzee populations (and their use of the forests), and changes in carbon stocks; (iii) a variety of socio-economic indicators, such as measures of household well-being and livelihood strategies; and (iv) attitudes toward conservation, including assessment of human-wildlife conflicts.

55. Management plans for forest use and restoration of degraded forests were drawn up and refined through a participatory process with landowners in focus groups and with community organizations to ensure that the practices proposed for payment (as part of the contracts with the PFOs in the treatment group) were feasible, and appropriate support activities were identified.

¹⁰ Testing the Effectiveness of Payments for Ecosystem Services to Enhance Conservation in Production Landscapes in Uganda: A Prospective randomized Evaluation. (2014). Final Report Prepared for UNEP. Prepared by Seema Jayachandran (Northwestern University), Joost de Laat (World Bank), Eric Lambin (Stanford University) and Charlotte Stanton (Stanford University).

Table 3: Project Logical Framework (provided by Project Manager, not showing activities)

Component	Outcome/ Output	Baseline	Indicator of Success	End of project target	Means of verification	Risks and assumptions
Project Objective: To test the effectiveness of PES as a viable means for financing and procuring biodiversity conservation outside protected areas in Uganda using an experimental methodology		PPG information available on potential land owners, location and limited ecological and socio- economic data Detailed household baseline indicator data to be obtained by this project by end of year 1	Statistical analysis of relevant parameters show that the results are conclusive on whether experimental land owners performed better than the control group	Project result have been analyzed and provided evidence of success or failure of PES scheme as viable. Results being widely discussed with stakeholders and informing policy makers in Uganda and at the GEF.	PES mechanism reports Consultancy reports Progress reports Mid-term and Final Evaluation Reports	Project is successfully implemented as per the project document
Component 1. Piloting of PES scheme(s) using a randomized design and other experimental methodologies	Outcome: Evidence of effectiveness of payment scheme(s) to a) reduce deforestation and biodiversity loss and b) cover local costs associated with maintaining biodiversity	No PES scheme exists in the project areas	Recognition of the PES scheme in Uganda by other stakeholders Requests by other landowners and stakeholders for a similar scheme	By end of 4th year the scheme will be completed, ecosystem gains quantifiable and discussions going on how to replicate the project in other areas.	Interviews with land owners Records at CSWCT to prove payments and records at IPA to show the evaluation results	Project implementation is successful
	Output 1.1: A pilot PES scheme designed and implemented	No PES scheme exists	Ongoing PES scheme- and evaluation of the same running smoothly	By end of 4th year- the Scheme will be completed, with all 342 owners having received payments for 2 years, and evaluations completed	Interviews with land owners Records of payments, evaluation surveys and photographs of ecosystem changes	Project implementation is successful

Component 2. Strengthening technical and institutional capacity to design, implement and monitor PES schemes	Outcome 2: An increased number of national and community stakeholders understand the design and implementation of PES scheme using a randomized experimental design	There is limited knowledge and training on PES schemes in Uganda	Increased level of knowledge on PES and its importance in BD conservation understood by community, technocrats and private sector Number of trained people applying training during their work activities	All training completed and PES methods being discussed in different forums in Uganda and globally as a result of this project	Mention of the project in other PES projects and workshops. Interviews with trainees and evidence of how they are using the new knowledge.	
	Output 2.1: Local resource users trained in the application of land- uses to maximize biodiversity maintenance	No PES exists in project area	Number of trained people in community, technocrats and private sector	All training completed	Evidence of training materials used. Interviews with trainees	
	Output 2.2: Monitoring schemes established and national partners trained to oversee the maintenance of biodiversity and payment compliance	No PES exists in project area	Number of trained people in community, technocrats and private sector	All training completed	Evidence of training materials used. Interviews with trainees	
Component 3: Generating, developing and disseminating a replicable PES model (s) based on lessons learned and best practices	Outcome 3.1: Project lessons in using PES to deliver multiple benefits including global benefits communicated nationally and internationally for wider replication	No PES scheme of this nature exists in Uganda.	Lessons & results from the project being quoted or used widely by other PES players locally and globally	Lessons & results disseminated and being presented in different forums	Written articles Draft papers for publication Number of presentations in national or international workshops.	Project implementation is successful and completed
	Output 3.1: Results of the PES scheme tested statistically to show whether it works or not in the project area	No PES scheme	The GoU is utilizing the project results Other international players using the results of the project	Conclusive data available to compare the results of the two groups, and information being used to design other projects	Data being used by international scientists from this project Publications	
	Output 3.2: Identify possible sites for replication of most effective payment scheme(s)	No PES scheme	The GoU is utilizing the project results Other international players using the results of the project	Conclusive data available to compare the results of the two groups, and information being used to design other projects	Data being used by international scientists from this project Publications	

	Output 3.3: Synthesis and publication of project results in leading peer- reviewed journals and presentation of project results at key regional and global forums	No PES scheme	The GoU is utilizing the project results Other international players using the results of the project	Conclusive data available to compare the results of the two groups, and information being used to design other projects	Data being used by international scientists from this project Publications	
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56. The level of payments to the ‘treatment PFOs’ was calculated and an initial budget set at the design stage for a three-year period, calculated at UGX70,000/ha/year for an expected 400 beneficiaries over three years, which gave a total of US\$108,000¹¹.

2.3 Target areas/groups

57. The Project focuses on private and communal forests in the Hoima and Kibaale Districts between Budongo, Bugoma, Rwengeye, Kyamurangi, Kasato and Kijuna Central Forest Reserves (CFRs). This area forms part of a northern forest corridor linking the main CFRs and is home to some of Uganda’s largest chimpanzee populations living outside of protected areas.

58. The remaining forests and their biodiversity (including chimpanzee populations) in the Project area are threatened by clearing of forests for cash crops, particularly tobacco and rice and other human activities, exacerbated by high local human population growth (5.2% per year compared to national average of 3.2%), substantial in-migration (mainly Bakiga people from southern Uganda), and high demand for timber, poles and charcoal (resulting in illegal removal from private forest reserves), combined with poor agricultural technology and innovation. These threats risk isolating the surrounding CFRs and halting gene flow across different populations of animal species within the landscape. The rate of forest loss was calculated at 8,000ha/year in 2010 and recent estimates suggest that all forests on private land in the area would be cleared within the next 10 years without action (Dr. Miguel Leal pers.com).

59. Chimpanzee groups in the region vary from 20-60 individuals but these are not considered viable if they continue to remain isolated so conservation efforts are seeking to link these remaining forest patches to maintain a corridor between forest reserves with their larger populations of chimpanzees (there is good evidence that chimpanzees do ‘commute’ between forest areas).

2.4 Implementation Arrangements

60. The GEF Implementing Agency (IA) for this project was the United Nations Environment Programme (UNEP)¹². The Government of Uganda’s (GoU) National Environment Management Authority (NEMA) is the executing agency, but the Chimpanzee Sanctuary & Wildlife Conservation Trust (CSWCT) carried out day-to-day project execution. A Project Management Unit (PMU) was established within the CSWCT at their office at Hoima (in Hoima District), headed by a Project Manager (PM) but with project finances managed by CSWCT’s office in Entebbe. The Project had a Project Steering Committee (PSC) that was to provide overall guidance and direction for the Project, as well as approving the Project’s annual work plans and budgets. The Project has also been guided by a Technical Committee (TC), established by NEMA, composed of representatives from various pertinent thematic sectors, private sector, NGOs and key project partners, including the Ministry of the Environment.

61. The large number of partners (unusually large for a GEF project of this size) mostly played distinct and separate roles in project execution. The International Institute for Environment and Development (IIED) was involved from the initial project concept stage and was to be a co-executing agency (with NEMA) guiding the design and implementation of the PES, although this arrangement never developed (see section 2.14.2). A collaboration between the Uganda-based Nature Harness Initiatives (NAHI), Innovations for Poverty Action (IPA), and a group of international researchers (economists/social scientists and an ecologist) led by two Principal Investigators (PIs) from (originally) the University of Quebec at Montreal Canada (UQAM)¹³ and Northwestern University in the United States, with input from other researchers

¹¹ The payment scheme was to be designed and implemented in accordance with internationally recognized standards of best practice, in particular the Climate, Community and Biodiversity Alliance (CCBS) standards - <http://www.climate-standards.org/ccb-standards/>.

¹² One of UNEP’s perceived ‘niches’ in the GEF portfolio is methodology so it was logical that UNEP should promote this Project and act as the IA.

¹³ The lead Principal Investigator, Prof Joost de Laat, is now at the World Bank.

from Stanford University, was intended to lead the *ex-post* evaluation comparing the environmental and social changes after payments. In addition, the Katoomba Group operated as the main trainers, providing tailored training courses on PES.

62. A combined national inception workshop and first PSC meeting was held in Hoima district, Western Uganda in June 2010, at which the Project's implementation arrangements were revised and confirmed. The Project Manager was recruited in August 2010 and commenced his duties in September 2010.

2.5 Project Financing

63. The GEF provided US\$ 900,873 of external financing to the Project (representing 42% of the overall funding), categorising the project as a Medium-Size Project (MSP). The Project was expected to mobilize another USD 1,232,400 in co-financing from a number of partners, a significant amount of which (US\$758,400, 61.5%) was identified as cash co-financing with substantial amounts offered by NEMA (US\$320,000) and IIED (US\$300,000) as well as a private sector hydroelectric company (Hydromax US\$80,000). The co-financing pledged at project submission to GEF brought the Project's total cost to US\$ 2,132,400.

2.6 Project partners

64. A comprehensive stakeholder analysis was conducted during the Project Preparation Grant (PPG) phase by the Katoomba Group and the NAHI which identified several general groups of stakeholders that the Project needed to engage during implementation of the full project. These included: land owners (the PFOs), NEMA, other sectoral government agencies, CSWCT, Katoomba Group, international researchers from a variety of universities (including Uganda), NAHI, private sector ecosystem service buyers, UNEP, and the GEF (including its Scientific and Technical Advisory Panel (STAP)).

65. Potential private sector partners and the main buyers for ecosystem services provided by the target area were to include breweries, soft drink bottling companies, municipal water companies, tobacco and sugar growers, honey buying companies, hydro electric companies and flower farms. Many of these were contacted during the PPG phase and some participated in an initial stakeholder workshop. It was expected that some would eventually be involved in providing funds for the PES scheme especially in the last year of implementation and some were represented on the PSC e.g. Hydromax.

2.7 Changes in design during implementation

66. The Project was originally planned to run from 1 June 2010 to 30 April 2014, but it experienced delays with its start-up and there were further delays during the first year caused by external events, notably national elections. As a result, the project was granted a 6-month no-cost extension (NCE) to take the completion date to 31 October 2014. According to the justification in the project extension proposal, this was to provide an opportunity to complete final project activities, particularly the promotion of the PES schemes to national and international buyers (Activity 1.7 in logframe), complete data analysis (Activity 1.10) and other activities associated with generating, disseminating and replicating project lessons.

67. Several changes to targets in the logframe were presented to, and approved by, the PSC following the first PSC meeting/inception workshop in June 2010, such as a change in the number of villages from 40 to 70 villages for both treatment and control groups, and using the actual number of PFOs under the scheme (342 with signed contracts). The Mid-Term Review (MTR), which took place in December 2012 to January 2013, also made several recommendations, including additional minor changes to some of the Project's logframe indicators and targets, and that all project management activities should be captured under Component 4. The revised version of the logframe was used for the remainder of the Project lifetime.

68. The single biggest change to the Project was the increase in the number of villages (sample size) as this markedly increased the management, administrative and financial demands on the Project, including the need to establish new links and relationships with the local authorities and communities in the Kibaale District, which had not previously been included in the Project and had different social mix and issues (the CSWCT had undertaken much more work previously in the Hoima District which is why the Project was to be focused there originally). Two other major consequences of the decision to increase sample size was the need to source a vehicle for the PMU because of the increased distances involved¹⁴, and considerably greater management and administrative input from the CSWCT for day-to-day operation of the Project, including the need to increase the number of Community Monitors from 15 to 25 (fund 10 extra). The increase in the number of villages also increased the amount of information that needed to be collected by NAHI and IPA, and also the time needed to analyse the data collected by the international research team. The budget was re-viewed and reallocated following the first PSC meeting with extra money assigned to the international research component¹⁵.

69. The increased demands on the budget and the late start of the Project meant that the period over which payments to the PFOs could be made was reduced from three to two years. It was acknowledged that additional fund-raising was needed to cover the increased demands (there were no additional GEF funds available), especially as some of the originally identified co-financing pledged at the PPG stage – notably the cash co-financing from NEMA and Hydromax – did not materialize (see section 2.14.6). Some extra funding from a UK Darwin Initiative grant for a project that had been developed in parallel by the CSWCT and IIED helped to compensate for the shortage of funds needed to establish and operate the PES scheme and was used to employ some of the PMU staff (see section 2.14.6). Additional funding was also secured from 3ie by the international researchers to analyse the research data. Several other attempts were made to procure other funding including for a third year of funding of the PES scheme payments but these were unsuccessful. Much of the extra personnel time required has come from additional in-kind co-financing e.g. for the international researchers this has come through their host institutions. Without these additional sources of cash and in-kind co-financing the Project would probably have collapsed. However, at the TE there still remained insufficient funding to complete the analysis of the data).

70. The original timetable only allowed 2-3 months for awareness-raising, community sensitization and the contracting process. However, as the almost doubling of the sample size meant that there was too little time (or resources) for in-depth sensitization across the two Districts, which impacted the number of PFOs who ultimately signed up to the Project, especially as the international research team insisted that the Project had to start as soon as possible after the first PSC meeting/inception workshop.

Lesson 1. In establishing a PES scheme, an adequate sensitization and negotiation period (suggested 3 months) needs to be allowed to ensure people are given the chance to participate, and time to consider what is being proposed and to discuss with their families, and there needs to be adequate funds to ensure their involvement in this process.

71. Whilst it is not unusual for GEF projects to be modified at the inception stage, the almost doubling of work required to deliver the Project following the first PSC meeting (so after its budget had been approved by GEF and the project implementation begun) should not have been approved by UNEP without already clear existing additional funding sources available to make up for the shortfall. The sample size identified by the group of international researchers at the PPG stage had clearly been miscalculated (it is

¹⁴ Originally NEMA was to provide a vehicle to the Project as its cash co-financing, but due to government budget cuts this could not be delivered. As a result, the CSWCT felt there was no alternative but to cut short one of its other projects and redeploy the vehicle associated with that project to the Project's activities in Hoima and Kibaale. Without this generosity on the part of the CSWCT, the GEF project would have been unable to operate, at least not across two Districts.

¹⁵ The total budget for the PFOs stayed within the earlier budgeted amount because 342 landowners signed up, which was within the earlier target of 400, which had been budgeted for. However, the cost to execute the PES scheme and deliver the payments increased as a result of the increase in the number of villages from 40 to 70, which had to be covered by co-financing from the Darwin Initiative.

not clear whether a power calculation had been made at this stage to help determine sample size) and the consequences of increasing it to 140 villages, including targeting a new District, were not thought through properly.

72. The TE understands that this decision and the subsequent (hugely) increased work loads generated a certain amount of friction, mistrust and loss of respect between some partners, especially as the increase in sample size was requested by the international research team whose position within the decision-making hierarchy within the Project was not clearly set out (they had no direct contract with NEMA and acted as advisors to IPA – see section 2.14.2).

2.8 Reconstructed Theory of Change of the Project

73. A good results framework should clearly articulate the logic that underpins the project's strategy and therefore present clear causal relationships between a project's activities, outputs (goods and services delivered by the project) and immediate project outcomes (changes resulting from the use of project outputs by key stakeholders), and longer-term intermediate states leading to the project's ultimate desired impact (changes in environmental and social benefits).

74. A Theory of Change (ToC) is a diagrammatic representation of the causal logic of a project, derived directly from the project strategy/design documents. It can also help define the external factors that influence change along the pathways and whether one result can lead to the next, which may be either drivers (over which the project has a certain level of control) or assumptions (where the project has no, or no significant, control). The ToC can also help identify the expected role and contributions of key actors.

75. The Project's logic was examined and used to produce a reconstructed ToC, and progress made towards achievement of project objectives and impacts was assessed using a Review of Outcomes to Impacts (ROtI) analysis (see section 2.8) based on this reconstructed ToC.

Project's causal logic as set out in the project documents

76. The Project did not prepare a ToC itself (ToCs were not required for GEF projects by UNEP at the time the Project was designed). Although there is a logframe given as an Appendix, the narrative on the intervention logic and causal pathways from project outputs towards impact are not well described in the main project documents.

77. As mentioned above, although PES schemes have been developed for some years and have become increasingly common globally (including many in the GEF portfolio), there is still debate about their effectiveness and applicability, both in terms of their conservation impact and costs-benefits ratio. In most cases, their effectiveness has not been rigorously tested; rather it is just assumed they will deliver their proposed biodiversity, social and economic goals. Also, there are few data on whether some PES scheme designs are more effective than other approaches. Consequently, policy makers, particularly in non-environment sectors, e.g. agricultural, financial, still need to be convinced that PES schemes are effective and should be adopted more widely as a key tool for sustainable use of natural resources, rural development, poverty alleviation and biodiversity conservation.

78. Thus the Project's intervention is based on the premise that demonstrating robust, scientifically rigorous evidence for strong cost-effective biodiversity, social, and particularly, economic gains from a PES scheme in Uganda (solid 'proof of concept') would lead to a better understanding and appreciation of the operation, value and utility of the PES approach and persuade decision-makers to adopt it as an alternative to the usual land use approaches in Western Uganda, e.g. clearance of forests for cash crops. This would then lead to increased calls and resources to protect Uganda's forests and biodiversity conservation in the country's production landscapes. Conversely, if the Project does not demonstrate clear positive benefits

then project results will be ignored, the PES approach will not be widely adopted as an alternative to traditional land practices, and the Project will have no impact.

Reconstructed ToC

79. A ToC was reconstructed during the inception period based on an initial review of project documents and preliminary interviews with key project management figures, and then reviewed and revised following further discussions with the project management team and other interviewees during the main evaluation period.

80. The Project's stated **objective** - 'to test the effectiveness of PES as a viable means for financing and procuring biodiversity conservation outside protected areas in Uganda using an experimental methodology' - does not represent a result at impact level but deals with testing an approach/tool, the results from which can hopefully be used to encourage adoption of more sustainable forest/land use practices in the forest corridors between protected areas in Uganda. Consequently, its design focused on the output rather than outcome level and did not seek to engender environmental change and impact directly (which is what GEF and UNEP biodiversity projects generally seek to deliver).

81. The Project was essentially designed as a short-term research project to try to answer the question whether the PES approach is effective at delivering environmental, social and economic benefits in a small region of western Uganda, using an 'experimental methodology'. A key expected Project output was to be data that would clearly demonstrate the effectiveness of PES to: (a) reduce (and preferably reverse) deforestation and biodiversity loss; and (b) deliver social (including financial) benefits, at minimum cost associated with maintaining biodiversity. Such evidence was to be used to support wider promotion of the PES approach (thus support evidence-based decision-making). In line with the focus at the output level, activities and mechanisms to move the project results from the output to outcome and higher intermediate states of the causal logic – e.g. to feed results into national and international decision-making processes to generate a wider impact - are poorly described in the project design documents.

82. The Project's **goal** - '*enhancement of Biodiversity Conservation in Production Landscapes in Uganda and globally*' (which reflects the GEF IV stated BD-SP2), gives only a loose statement of the Project's hoped for environmental impact. However, this can be derived from the Project's overall environmental problem statement - the high level of deforestation and forest degradation outside protected areas in Uganda - and formulated as 'Reduced and reversed forest biodiversity loss and degradation outside protected areas in Uganda'. Although showing changes in social and economic circumstances within 3-4 years of a GEF project is generally possible (if there are no significant delays to implementation), changes in biodiversity – in this case the population of chimpanzees (and its gene flows) and other biodiversity associated with the forests targeted by the Project – are more difficult to determine as populations of long-lived (K-selected) species usually change over a longer timescale. Consequently, the Project's final desired environmental impact is not immediately realizable within the 3-4 year time frame of the Project (although the general direction may be determinable). The reconstructed ToC is therefore used to determine the likelihood of achieving this desired impact in the future. This is presented in Figure 1 below.

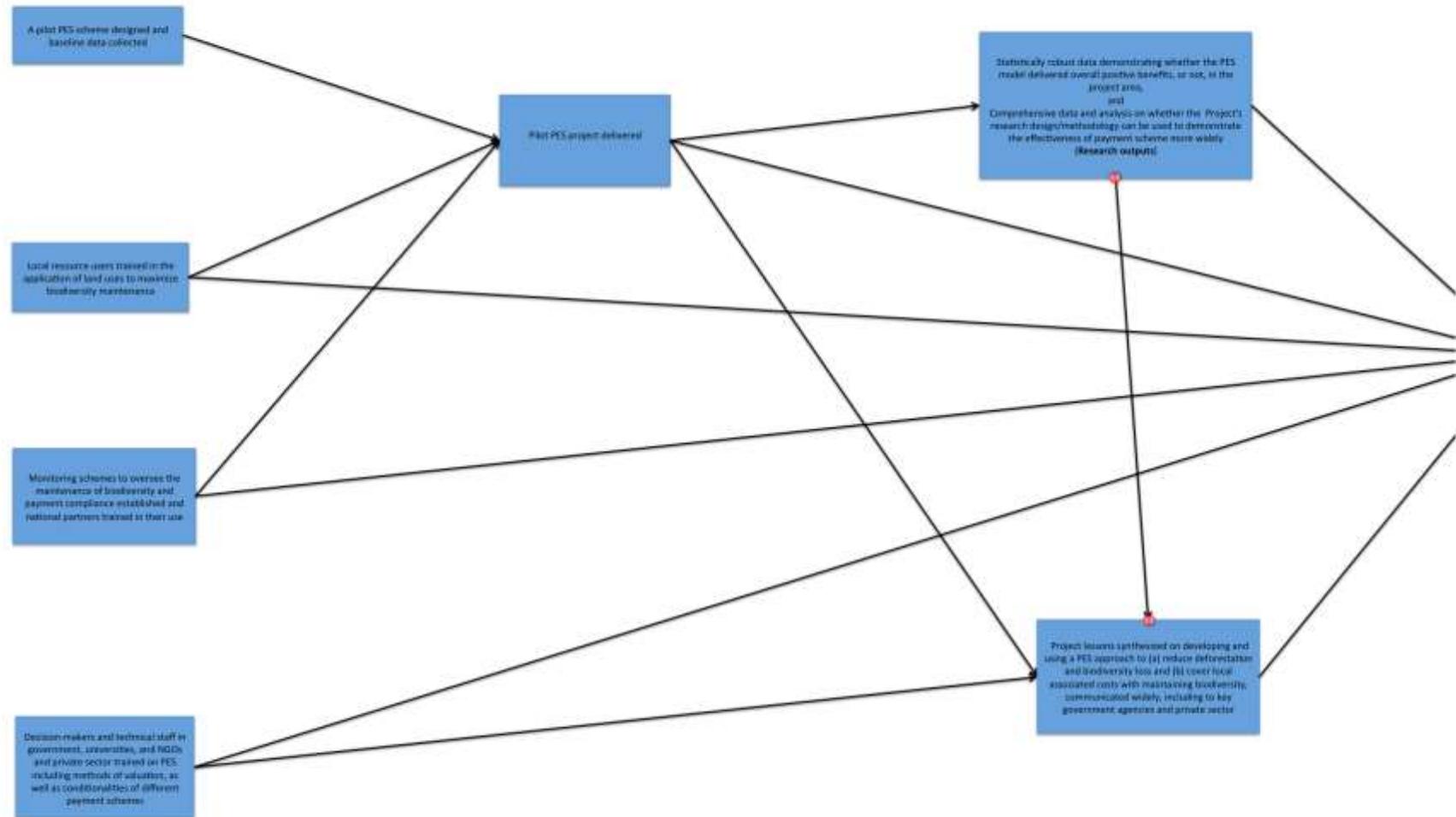
Figure 1: Reconstructed Theory of Change (ToC) for the Uganda PES Project (D = driver; A = Assumption; IS = Intermediate State)

Project activities (grey)

- Activity 1.1: Determination of land management practices for ecosystem services delivery
- Activity 1.2: Determination of the payment level and payment modalities
- Activity 1.3: MOUs with Land Owners
- Activity 1.4: Baseline data collection from individual land parcels
- Activity 1.5: Estimation of the ecosystem services changes to be delivered by the project
- Activity 1.6: Determine and put in place an appropriate institutional framework for the scheme
- Activity 1.7: Promote the PES scheme to national and international buyers
- Activity 1.8: Administering the payments
- Activity 1.9: Monitoring and Evaluation of the PES scheme
- Activity 1.10: Data analysis
- Activity 2.1: Development of training materials for the PES
- Activity 2.2: Local community training in PES
- Activity 2.3: Training of technicians in PES
- Activity 2.4: Private Sector training
- Activity 3.1: Inception workshop
- Activity 3.2: Project reports and PMs
- Activity 3.3: Independent Evaluations
- Activity 3.4: The Technical Committee (TC) and the Project Steering Committee (PSC)
- Activity 3.5: Completion of lesson learnt and communication on the project



Project outputs (blue)

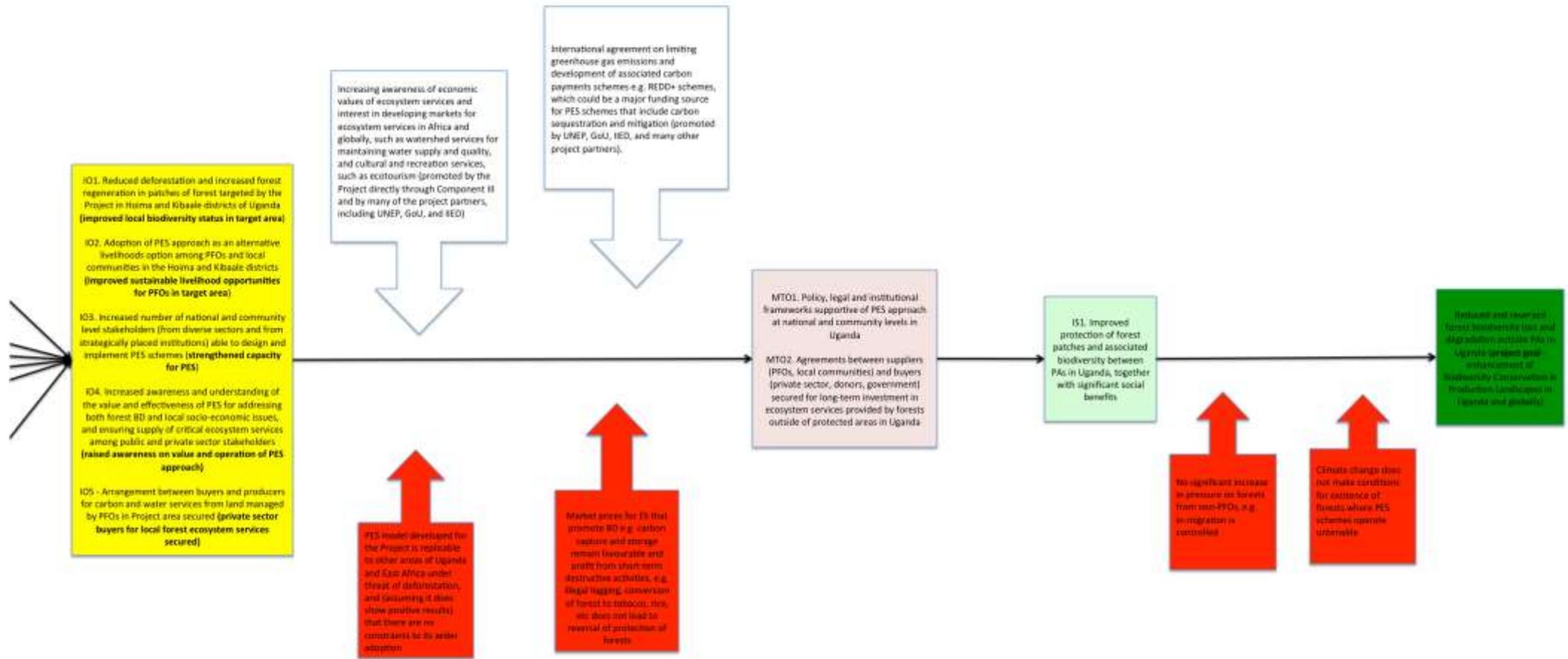


Immediate outcomes (yellow)

Medium Term Outcomes (pink)

Intermediate States (pale green)

Impact (dark green)



83. The Project's strategy is set out in its first three Components¹⁶, and comprises a set of activities that would lead to outputs, which, if achieved, would then deliver three 'technical' outcomes¹⁷ that would then lead to achievement of the Project's aims and eventual impact. A review of the Project's outcomes revealed that Outcomes 1 and 3 are formulated more at the output level - *Outcome 1: Evidence of effectiveness of payment scheme(s) to a) reduce deforestation and biodiversity loss and b) cover local costs associated with maintaining biodiversity*; and *Outcome 3: Project lessons in using PES to deliver multiple benefits including global benefits communicated nationally and internationally for wider replication* - as neither require changes in behaviour nor state to achieve this. Also, the first two 'technical' components (Component I focused on generation of key information on the effectiveness of PES, and Component II on improving capacity to design and implement PES schemes) operate more or less in parallel and are complementary, whereas Component III (dissemination of the project results) rests on delivery of the first two components (particularly Component I), and partly assumes that the PES scheme will show strong evidence of effectiveness (without strong evidence from Component I, Component III becomes redundant).

84. The Project aimed to produce the following initial direct outputs:

- A PES scheme designed and baseline data collected;
- Local resource users trained in the application of land uses to maximize biodiversity maintenance;
- Monitoring schemes to oversee the maintenance of biodiversity and payment compliance established and national partners trained in their use; and
- Decision-makers and technical staff in government, universities, and NGOs and private sector trained on PES including methods of valuation, as well as conditionalities of different payment schemes.

85. Some of the Project's outputs are not at their expected level within the ToC. Consequently, the causal logic presented in the ProDoc is confused in places and difficult to follow; the reconstructed ToC attempts to untangle this.

86. Together these lead to the pilot PES project being delivered, with two associated research-related outputs: (i) statistically robust data demonstrating whether the PES model delivered overall positive benefits (or not) in the Project area, and (ii) comprehensive data and analysis on whether the Project's research design/methodology can be used to demonstrate the effectiveness of such payment schemes more widely.

87. Project lessons on developing and using a PES approach to (a) reduce deforestation and biodiversity loss and (b) cover local associated costs with maintaining biodiversity, including those aimed at key government agencies and the private sector would then be synthesized from the experiences of delivering all the above outputs, and communicated widely.

88. If these outputs are delivered then five immediate project outcomes follow:

- IO1. Reduced deforestation and increased forest regeneration in patches of forest targeted by the Project in Hoima and Kibaale districts of Uganda (**improved local biodiversity status in target area**);

¹⁶ Component IV relates to project management and is not relevant here.

¹⁷ The Project outcomes and outputs under these components are summarized in the Logical Framework Analysis (Logframe) of the Project Document (Annex 4).

- IO2. Adoption of PES approach as an alternative livelihoods option among PFOs and local communities in the Hoima and Kibaale districts (**improved sustainable livelihood opportunities for PFOs in target area**);
- IO3. Increased number of national and community level stakeholders (from diverse sectors and from strategically placed institutions) able to design and implement PES schemes (**strengthened local and national capacity for PES and SFM**);
- IO4. Increased awareness and understanding of the value and effectiveness of PES for addressing both forest biodiversity (BD) and local socio-economic issues, and ensuring supply of critical ecosystem services among public and private sector stakeholders (**raised awareness on value and operation of PES approach**); and,
- IO5 - Arrangement between buyers and producers for carbon and water services from land managed by PFOs in Project area secured (**private sector buyers for local forest ecosystem services secured**)

89. Two medium term outcomes (MTOs) were identified between these immediate project outcomes and the Project's longer-term intended impacts:

- MTO1. Policy, legal and institutional frameworks supportive of PES approach at national and community levels in Uganda;
- MTO2. Agreements between suppliers (PFOs, local communities) and buyers (private sector, donors, government) secured for long-term investment in ecosystem services provided by forests outside of protected areas in Uganda.

90. If these are achieved then over the longer term (along with other non-GEF project inputs), it would be expected that there would be improved protection of forest patches and associated biodiversity outside of PAs in Uganda, together with notable social and economic benefits, which would ultimately lead to forest biodiversity and ecosystem services being secured and restored.

91. However, there are a number of assumptions and drivers that may either impede or enhance the movement along the causal chain and the eventual achievement of the Project's desired impact. These include the assumptions that:

- The PES model developed for the Project is replicable to other areas of Uganda and East Africa under threat of deforestation – in other words, the model is not successful simply for the Hoima/Kibaale area (assuming it does show positive results) and there are no constraints to its wider adoption;
- Market prices for ecosystem services (ES) that can promote biodiversity conservation, e.g. for carbon credits, remain favourable, and increased profit from short-term destructive activities, e.g. illegal logging and conversion of forest to tobacco and rice, do not lead to the reversal of protection of the forests (in other words there is a continued economic case for a PES approach);
- There is no significant increase in pressure on forests from non-PFOs, e.g. in-migration is controlled; and
- Climate change does not make conditions for existence of forests where PES schemes can operate untenable.

92. There are also a number of drivers that could be influenced by the Project's stakeholders and UNEP that could facilitate progress along the causal chain. These include:

- Increasing awareness of the economic values of ecosystem services and interest in developing markets for ecosystem services in Africa and globally, such as watershed services for maintaining water supply and quality, and cultural and recreation services, such as ecotourism

(promoted by the Project directly through Component III and by many of the project partners, including UNEP, GoU, and IIED);

- International agreements on limiting greenhouse gas emissions and the development of associated carbon payments schemes e.g. REDD+ schemes, which could be a major funding source for PES schemes that include carbon sequestration and mitigation (supported by UNEP, GoU, IIED, and many other project partners).

93. As noted above, the move along the causal chain from project outcomes to impact only occurs if the results from the Project are positive and convincing (that there are cost-effective ecological, social and economic gains from the PES model), so it is assumed that if results are not statistically robust it will be difficult to convince decision-makers to adopt the PES model more widely and mainstreaming of PES into national policy and planning is unlikely to take place.

EVALUATION FINDINGS

2.9 Strategic Relevance

2.9.1 Alignment with GEF focal areas and strategic priorities

94. The Project contributes to two main GEF Focal Areas - Biodiversity (BD) and Land Degradation (LD), and also contributes to the GEF cross-cutting area of Sustainable Forest Management. The Project supports achievement of the global outcomes of the following GEF IV Strategic Programs: BD-Strategic Objective 2 – ‘to maintain biodiversity in production landscapes/seascapes and sectors’, notably BD-SP5 – ‘Fostering markets for biodiversity goods and services’, as well as LD-SP2, ‘Supporting sustainable forest management in production landscapes’ (also known as SFM-SP5 and SFM-SP-7).

95. The Project responded to STAP guidelines on PES¹⁸, but goes further than other GEF projects by proposing to include an experimental approach to test the efficacy of the PES scheme using a randomized design with treatment and control groups, as well as trying to capture lessons learned through greater data collection than most PES projects.

2.9.2 Relevance to global, regional and national environmental issues and needs

96. The Project is focused at the local and national levels but its results (testing of a PES approach as an effective means of delivering sustainable biodiversity conservation and socio-economic benefits) are considered likely to be of regional and global interest. Given the focus on forest biodiversity, especially chimpanzees, it is also likely to be of significant regional interest, and particularly its targeting at forest areas between formally protected areas (corridors) of wider global interest. There is currently considerable attention within the conservation community on how best to connect PAs to allow movement and dispersion of species in the face of growing human populations and the predicted impacts of climate change. The Project looks at an alternative way of linking forest reserves (alternative to buying additional land as corridors), which, if successful, may be one possible approach for linking PA management¹⁹.

97. Although not explicitly mentioned in project documents, the Project does help address some of the conservation needs identified in some regional or sub-regional strategies and plans. For instance, the

¹⁸ Found at <https://www.cbd.int/doc/case-studies/inc/cs-inc-gef-pesguide-en.pdf>, the web link given in the ProDoc <http://stapgef.unep.org/resources/sg/PES> does not work

¹⁹ This is reflected in a recently approved UNEP project to support the development of a UNEP Global Connectivity Conservation Strategy.

Project complements the 2010-2020 IUCN Chimpanzee Conservation Action Plan, which also mentions the use of incentives to achieve conservation.

98. The Project is also in line with national priorities and plans. Uganda's environmental legislation and associated action plans and programmes, e.g. the National Environment Act Cap 153, National Biodiversity Strategy and Action Plan (NBSAP), National Environmental Action Plan, are generally supportive of PES mechanisms, and recognize the need for economic instruments such as payments/incentives for ecosystem services and their potential for encouraging biodiversity conservation and alleviating poverty. The Project also fits well with revision of the NBSAP, which references PES, and the draft Environment Act and Environment Policy also mention PES. In addition, the Project is consistent with national guidelines on private forestry management focus on gaps outside of forest reserves and other protected areas. Also, although PES is not cited in Uganda's Forest Sector Plan or National Development Plan 2010/11 - 2014/15, the need for strengthening legal frameworks for environment protection, private sector engagement in environment protection, and a system for water-use permits are all referred to directly in these plans.

99. Deforestation is especially occurring along the riverine forests outside of protected areas in Western Uganda, but how to incentivize forest owners to stop them clearing these forests has been a major preoccupation for NEMA, particularly the question of whether a PES approach could work for Uganda's many small farmers. Consequently the Project with its focus on providing incentives through a PES scheme, was considered highly relevant nationally.

100. The aims of the Project also fit well with the priorities and action plans of numerous stakeholder groups concerned with biodiversity conservation, sustainable forest management and/or poverty alleviation in the Albertine Rift region, e.g. WWF, WCS, etc. Indeed, the project concept partly emerged from the CSWCT's Strategic Plan for 2007-2012, which advocated for environmental awareness, collaborative forest management and provision of incentives such as alternative livelihoods and PES is highlighted as 'the most important potential source of funds, particularly through REDD payments in the Strategic Plan for the Northern Albertine Rift of Uganda 2011-2020'.

2.9.3 Alignment with UNEP's strategy, policies and mandate

101. The Project fits under UNEP's Medium Term Strategy (MTS) for 2010-2013, which identifies six cross-cutting thematic priorities, organized as discrete subprogrammes. The Project is most relevant to the Ecosystem Management (EMSP) and Climate Change (CCSP) subprogrammes, and is particularly relevant to two of the MTS's five 'means of implementation' – 'sound science for decision-makers' and 'awareness-raising, outreach and communications'. The Project has contributed indirectly to MTS Expected Accomplishments within the EMSP, particularly EA(a) '*countries and regions increasingly integrate an ecosystem management approach into development and planning processes*', (E(b) '*countries and regions have capacity to utilize ecosystem management tools*' and EA(c) '*countries and regions begin to realign their environmental programmes and financing to address degradation of selected priority ecosystem services*'. It has also contributed to the aims of the CCSP, notably EA (d) '*increased carbon sequestration occurs through improved land use, reduced deforestation and reduced land degradation*'.

102. In addition, UNEP's Programme of Work for 2010-2011 sought to promote transformation of the forest sector, which would only be realisable through increased investment and additional sources for SFM. The Project looks to show that PES schemes can provide a potential source of sustainable financing for improved forest management, particularly outside of formally protected areas and forest reserves. The Project also indirectly contributes to UNEP's Forest Strategy - 'Strategic Agenda on Forest Ecosystems and Their Services' - although this was drafted in 2013 after the Project was designed.

103. The Project directly complements a number of other specific UNEP projects under the EMSP and CCSP, particularly in relation to payment for ecosystem services, forest biodiversity conservation, watershed protection, ecosystem-based adaptation and REDD+ projects. It particularly complements on-

going UNEP work undertaken by the Ecosystems Services and Economics (ESE)²⁰ Unit (including other PES-related projects), and parallels implementation of UNEP's work programme under the Great Apes Survival Partnership (GRASP). The Project is also one of a number of PES-related and/or forest-conservation projects being funded by GEF across the world and the ProDoc lists a large number of GEF- and non-GEF funded projects and programmes which had been identified for potential collaboration with the Project.

104. Overall, the Project is consistent with UNEP's mandate, and relevant to several UNEP Governing Council (GC) decisions. However, it should be pointed out that the Project's connection with UNEP EAs and programmatic objectives was not highlighted in the project documents (although the fit with UNEP priorities was not judged so important for GEF funding applications).

Alignment with the Bali Strategic Plan (BSP)²¹

105. The Project has had important enabling and capacity building elements, with specific activities and outputs identified to build capacity to develop and implement PES schemes and so better access sustainable financing for forest biodiversity conservation in Western Uganda, with targeted workshops (under Component II) but also a series of awareness-raising initiatives and promotion of project results (which can be seen as helping to build understanding and technical knowledge and thus capacity under Component III). Consequently, the Project's aims and objectives have been relevant to, and consistent with, the BSP for Technological Support and Capacity Building which aims at more coherent, coordinated and effective delivery of capacity building and technical support at all levels and by all actors, in response to country priorities and needs.

Gender balance

106. The Project Management Team (CSWCT and NEMA) made considerable efforts to ensure women were included in project activities. Indeed, specific aspects of the Project were designed to ensure women could fully participate and that any benefits from the Project would go equally to both sexes. These included the requirement that PFO contracts had to be signed by both male and female heads of households (where they existed), and consultations were undertaken at the household level to ensure that the women in the household were fully aware of the Project, what was being requested, and the payments that were offered. There was an adequate gender balance on both the PSC and TC which meant that women's issues were kept at the fore during the design and implementation of the Project.

South-South Cooperation

107. The Project had no specific focus on South-South cooperation. Indeed, the research element of the Project – during both its design and implementation (see section 2.14.1) - was dominated by US-based academics, with little or no direct input from either researchers from Uganda or other neighbouring countries. This was recognized as a significant weakness of the Project.

The overall rating for project relevance is Highly Satisfactory.

2.10 Achievement of outputs

108. The degree of delivery of the Project's outputs is well detailed in the annual PIRs, Final Project Report (for reporting period June 2010 – October 2014, produced by the PMU) and the final 'impact

²⁰ See <http://www.unep.org/ecosystemmanagement/UNEPsWork/EcosystemServicesandEconomics/tabid/514/Default.aspx>

²¹ <http://www.unep.org/GC/GC23/documents/GC23-6-add-1.pdf>

assessment report' produced by the team of international researchers²². A summary of these individual project outputs (as given in the ProDoc) is given in Table 4. The delivery of key outputs is discussed below.

2.10.1 Component 1: Piloting of PES scheme(s) using a randomized design and other experimental methodologies

109. Most of the Project's activities relate to this Component and its associated outputs.

Output 1.1: A pilot PES scheme designed and implemented

110. The Project largely followed the design and sequence of activities set out in the ProDoc (and captured in the Project's logframe), except for the requirement to increase the number of villages and individuals included in both treatment and control groups (see section 2.14.1). This output was essentially fully delivered, and mostly well delivered with a scheme established and operated for two years and a great deal of ecological and socio-economic data collected, most of which has been analysed and reported on.

Design and establishment of the PES scheme

111. The Project collected baseline information on deforestation levels, forest use, and local institutions governing forest management, identified areas at risk of deforestation²³ and then randomized the participants into 'treatment' and 'control' groups. Attempts were made to ensure similarity between the treatment and control groups so that as homogenous a population as possible was sampled. A series of sensitization activities and contract negotiations were arranged with communities and individual PFOs to introduce the PES scheme, including discussions with PFOs on forest management interventions for both degraded and relatively intact forests through a comprehensive and well-coordinated consultation process led by CSWCT and NAHI. In the treatment group of villages, the option of payment was offered to individual landholders in return for implementing contractually agreed activities aimed at conservation, such as maintaining forest cover (regulating timber harvesting and halting conversion for agriculture) or actively patrolling forest areas, or reforestation such as planting of indigenous tree species to promote regeneration²⁴. These activities were set out in simple 'management plans' attached to contracts (termed MoUs) with individual PFOs. However, it should be noted that PFOs were still allowed to take out certain sized trees²⁵ for sale or their own use as, after initial consultations, it was judged impractical to expect PFOs to sign up to the scheme if they were forbidden from any form of cutting.

112. PFO contracts were translated into the local language and judged easy to understand and management plans were also considered straightforward, and it was clear from the TE interviews that considerable thought and discussion had gone into the design of payments, contracting, compliance and monitoring arrangements (IIED provided a good deal of important and essential advice on this). However, a few farmers did not have true title to the land they managed under the scheme and when it came to paying for delivery of contracts there was a conflict with the real owner who had not been living in the area.

113. An institutional framework was established with clear separation of roles between payment and compliance (CSWCT) and evaluation (IPA, NAHI) and analysis (international researchers) of the PES scheme.

²² Testing the Effectiveness of Payments for Ecosystem Services to Enhance Conservation in Production Landscapes in Uganda: A Prospective randomized Evaluation. (2014). Final Report Prepared for UNEP. Prepared by Seema Jayachandran (Northwestern University), Joost de Laat (World Bank), Eric Lambin (Stanford University) and Charlotte Stanton (Stanford University).

²³ The CSWCT (PMU) also partnered with WCS and JGI to conduct biodiversity surveys and socio-economic surveys for the entire corridor forests in Murchison Semliki Landscape, some of which was used as baseline for the Project.

²⁴ If PFOs agreed to take on the option of reforestation, plant seedlings were provided by CSWCT.

²⁵ PFOs could not cut medium-sized trees (10-50cm Diameter at Breast Height (DBH)), only mature trees (>50cm DBH) as specified, depending on number of each species present, but cutting of small trees of specified species according to the management guide (<10cm DBH) and gathering firewood from fallen trees was allowed.

Compliance monitoring was undertaken through the Community Monitors between July 2012 and January 2013 for the first year contractual payments and from July 2013 and March 2014 for the second contractual payments. Payments were executed by Post Bank Uganda Limited as the contracted financial institution, which ensured that the process benefited from their expertise as a financial institution²⁶.

Research element

114. Details of the research design are set out in the 'impact assessment report'. The primary environmental variables of interest were: the rate of deforestation; biomass, forest quality, and other biometric variables measured using satellite imagery; and land use behaviours (tree cutting, agricultural practices) using household surveys. Image area was calculated and images ground-truthed (species type, tree diameter, etc) using sampled ground measurements provided by NAHI. All individual forest assessment data was stored in a PES database developed by the PMU in 2011. Other ecological and socio-economic data were collected and stored in databases established specifically for this purpose by NAHI and IPA (e.g. tree-planting database held by NAHI). Initial direct surveys of biodiversity e.g. counts of chimpanzee nests, were abandoned after the first year as impractical given the manpower available.

Determining level of payment

115. There was considerable discussion and debate over what level to set the payment for the PFOs in the treatment group. A review of other PES schemes worldwide, led by IIED, was undertaken which examined both the supply and demand sides of ecosystem services, with a focus on carbon sequestration. As a result, IIED, CSWCT and WCS worked jointly to compute estimates of services to be secured through a voluntary carbon mechanism for the project area under three types of carbon emission reduction streams (avoided deforestation, carbon sequestration from reforestation and enhancement of forest carbon stocks as forests regenerate naturally) from which it was estimated that 33,955 tonnes of CO₂ per year would be secured from the Project area, based on various assumptions (detailed in project reports). While other ecosystem services provided by the forests, such as supply of water and ecotourism opportunities, were recognised, there was no detailed examination of the (potential) value of these, and there was no consideration of a multi-ecosystem service approach (bundling together various ecosystem services, which has been promoted by other PES projects). In the end, a value of UGX70,000/ha/year was agreed, equivalent to around US\$35/ha/year in June 2011 when payments were negotiated. More details of how the payment scheme was designed and developed are given in the MTR report, which for ease of access is repeated in Annex 9.

²⁶ Post Bank already had experience with loans for forest-based enterprises, e.g. bee-keeping and mushroom growing at low rates of interest so was judged a suitable potential partner. Initially each recipient of payment needed to set up a bank account with Post Bank but this was considered to present an unnecessary barrier that might have prevented some PFOs from joining the scheme and it would have led to differences between the treatment and control groups, which could have influenced sign up to the scheme.

Table 4 Summary of the Project's success in producing programmed outputs (largely taken from project's Terminal Report with verification during the evaluation)

Component	Expected Outcome	Output	Indicator	EoP target	Status of outputs at TE
Component 1. Piloting of PES scheme(s) using a randomized design and other experimental methodologies	Outcome 1: Evidence of effectiveness of payment scheme(s) to a) reduce deforestation and biodiversity loss and b) cover local costs associated with maintaining biodiversity	Output 1.1: A pilot PES scheme designed and implemented	Ongoing PES scheme and evaluation of the same running smoothly for a similar scheme	By end of 4th year- the Scheme will be completed, with all 342 owners having received payments for 2 years, and evaluations completed	PES scheme successfully designed and implemented, although due to delays in first year, limited budget and need to increase sample size only two years of payments were possible. 342 PFOs signed up to scheme of which 262 (76.6%) met compliance monitoring at the end of second year, which can be considered a success. Data collection for impact evaluation at baseline, midline and endline was completed.
Component 2. Strengthening technical and institutional capacity to design, implement and monitor PES schemes	Outcome 2: An increased number of national and community stakeholders understand the design and implementation of PES scheme using a randomized experimental design	Output 2.1 Local resource users trained in the application of land- uses to maximize biodiversity maintenance	Number of trained people in community, technocrats and private sector	All training completed	Training workshops, led by Katoomba Group, completed for local community participants as well as technocrats and private sector individuals in Kampala. Monitoring schemes established (IPA collecting socio-economic data, NAHI ecological, CSWCT compliance monitoring), and baseline, midline and endline data collected. Community Monitors trained.
		Output 2.2 Monitoring schemes established and national partners trained to oversee the maintenance of biodiversity and payment compliance			
Component 3: Generating, developing and disseminating a replicable PES model (s) based on lessons learned and best practices	Outcome 3: Project lessons in using PES to deliver multiple benefits including global benefits communicated nationally and internationally for wider replication	Output 3.1: Results of the PES scheme tested statistically to show whether it works or not in the project area	The GoU is utilizing the project results Other international players using the results of the project	Conclusive data available to compare the results of the two groups and information being used to design other projects	Analysis of socio-economic data completed but ecological data (satellite mapping data for analysis of deforestation and forest regeneration, as well as other ecological data collected by NAHI) would benefit from additional analysis. Some statistically significant socio-economic effects, although no clear statistical trend for deforestation or forest regeneration discernable in analyses undertaken to
		Output 3.2: Identify possible sites for			

Component	Expected Outcome	Output	Indicator	EoP target	Status of outputs at TE
		replication of most effective payment scheme(s)			date, in part due to low sample size. However, more anecdotal, qualitative evidence suggests reduced deforestation (clear) and some forest regeneration (less clear) on treatment PFO land.
		Output 3.3: Synthesis and publication of project results in leading peer-reviewed journals and presentation of project results at key regional and global forums			<p>No sites identified yet for replication of PES scheme, although many villages in the control group were asking/expecting to join the treatment group and experiences from the Project have been fed into several other PES initiatives at national level.</p> <p>Many articles in media, publications and reports in partner newsletters or on web. Publication of research findings in peer-reviewed journals delayed due to delays over analysis of data, and inconclusive results (ecological analysis not showing significant results).</p> <p>A marketing package for carbon trade and biodiversity conservation services for potential PES buyers was not produced.</p>

116. Biodiversity data was only recorded as presence or absence which is useful for distribution mapping but of limited use for estimating population and its changes. Anecdotal information was also recorded such as crop raiding by baboons and chimpanzees. Additional biodiversity information is included in the biodiversity monitoring report but was not analysed by the international researchers, and has not been fully interpreted and reported on.

117. Satellite images from the baseline and endline surveys were processed and analyzed²⁷ by Stanford University's Spatial Analysis Center and socio-economic data were analysed by Prof. Seema Jayachandran and Prof Joost De Laat.

Operation of the PES scheme²⁸

118. After publicizing the scheme in the two Districts, the Project undertook negotiation with 413 forest owners of which 342 ultimately signed contracts in 2011-2012 at the start of the PES scheme to manage an equivalent of 1,641.8ha forest area. This was less than originally hoped for (400 MoUs with PFOs), but is nevertheless a very significant number. Reasons given by PFOs who knew about the PES scheme but did not wish to be considered, included disputed/multiple ownership of land, a desire to cut trees, payments too low, and/or the contract was considered too complicated. In total, 65 Treatment and 4 pilot villages²⁹ and 71 Control villages were included in the PES scheme.

119. At the end of the first year of the scheme (ran from July 2012 to June 2013), 279 of the 342 PFOs in the treatment group (81.6 %) were judged to have partly or fully met their contractual obligations as stipulated in the individual contracts (MOUs) and were offered some form of payment. After the second year of the scheme (ran from July 2013 to June 2014), 262 PFOs of the 279 PFOs (93.9%) that qualified from the first year were judged to have fully or partially complied with their contracts and made a payment.

120. The difference in numbers of PFOs delivering on their contracts between the years was due to non-compliance attributed to land related conflicts, selling of forest, failure to meet contractual terms or voluntary suspension of participation. Most dropped out because they felt the measures in their management plans required too much work or were too time-consuming, particularly the planting and maintenance of seedlings. Nevertheless, the majority of the PFOs in the treatment group were obviously committed to the scheme and stayed the full two years, which can be considered a success and the Project team deserves credit for this. More details on compliance are given in the 'impact assessment report'.

121. Of the 342 PFOs who initially signed up to the scheme, 262 (76.6%) delivered on their contracts (MoUs) at the end of year two, and the area over which forest conservation practices took place over the two-year period of the scheme was 1,269ha.

122. Along with an increase in the proportion of PFOs who complied with their management plans between years one and two, the Project also reported an improvement in 'full compliance' between the first (42% of participants) and second (54% of participants) contractual phases. However, the high level of contract compliance during the second year may have been because the less committed individuals

²⁷ Technical details of the image processing methodology are given in the final impact assessment report.

²⁸ It should be noted that different partners within the Project have given different figures of achievement in their reports (for instance, the international researchers consider the uptake rate to be 34% whereas the CSWCT's view was that it was 53%). These differences appear to reflect a difference of opinion over how many individuals were in the initial interested group, which were used in the calculations. The CSWCT only considered PFOs who expressed interest/applied to join the scheme through the application process that was introduced as part of the consultation process which totaled 413; whereas the figure of 600 given in presentations by the international researchers appears to have been the average number of PFOs in a village (according to IPA baseline).

²⁹ According to CSWCT, the 4 villages were used to pre-test the design and implementation tools and were considered not appropriate to include in the analysis.

dropped out after first year, and PFOs had by that stage learned that would receive more money if they fully complied with their contract.

123. A schedule of the main project activities delivered under this Component is given in Annex 2.

2.10.2 Component 2: Strengthening technical and institutional capacity to design, implement and monitor PES schemes

Output 2.1 Local resource users trained in the application of land- uses to maximize biodiversity maintenance

124. An initial stakeholder assessment of gaps in technical knowledge of PES among the targeted communities and personnel was undertaken by the Katoomba Group, assisted by the PMU in 2011. Training was then provided on ecological monitoring and forest measurements, data collection, community mobilization and consultation³⁰ with the level set according to the educational background of the participants, and included development of training materials on PES that adapted existing materials with publication of reference materials on PES in Uganda³¹.

125. A key event was a 3-day community level training workshop in the Hoima District from 4-6th April 2011 to increase capacity of private landowners and local communities to make informed decisions about participation in PES schemes and to better interact with PES project developers. The meeting aimed to introduce concepts and practices of PES and was attended by 44 community leaders from the region. Foundational information on ecosystem services, markets, and payments, as well as basic components of project design, contracts, and associated land use change commitments was provided to participants, who were expected to pass on their new knowledge to other community members/community based organizations (CBOs) who could not attend the event (creating a multiplier effect).

126. An additional one-day training workshop on PES was conducted in Kampala for a total of 39 technocrats and private sector stakeholders, again facilitated by the Katoomba Group with presentations from various experts in PES and ecosystem service markets.

127. Unfortunately, the original budget for capacity building was very low and funds were soon exhausted by the Katoomba group training schedule. Consequently, additional training activities were largely funded through other projects, notably through two Darwin Initiative grants (treated as co-financing for the Project – see section 2.14.6). For instance, in 2011 and 2012, Darwin Initiative co-financing provided training for 24 Community Monitors and 8 Subcounty staff on various aspects of ecological censuses, mobilization and monitoring. Together with project field staff these Community Monitors were then able to disseminate key messages to close to 900 people through community level consultations with information tailored for the Project. So again a multiplier effect was sought, and judging from TE interviews this was successful in that interviewees displayed a high level of knowledge about PES and the ecosystem services provided by their forests.

Output 2.2 Monitoring schemes established and national partners trained to oversee the maintenance of biodiversity and payment compliance

³⁰ Resources from the workshop were uploaded to the Katoomba Group website and can be accessed at <http://www.katoombagroup.org/training/pastcourses.php#political> under the heading 'Building Capacity of Ugandan Communities to Make Informed Decisions about Engaging in Payments for Ecosystem Services.'

³¹http://www.katoombagroup.org/documents/cds/uganda_2011/Introduction%20to%20Ecosystem%20Services%20and%20Climate%20Change/Learning_About_ES_FINAL.pdf

128. Monitoring schemes were successfully established, with IPA collecting socio-economic data, NAHI ecological, and the CSWCT undertaking compliance monitoring. These activities are covered under Output 1.1 above as they are integral to establishing the PES scheme.

2.10.3 Component 3: Generating, developing and disseminating a replicable PES model (s) based on lessons learned and best practices

Output 3.1: Results of the PES scheme tested statistically to show whether it works or not in the project area

129. Although improving the protection of chimpanzees was the main 'biodiversity handle' on which the project was sold to the GEF, changes in deforestation and forest regeneration were used as proxies for assessing changes in forest biodiversity. Monitoring chimpanzee populations or most of the other animals associated with these forests was judged not suitable even though some initial forest biodiversity data were collected from ground surveys in 2010 and 2011 (and then discontinued), as it is difficult to show changes in population levels or distribution due to an intervention in just two years as these animals are long-lived, reproduce slowly, and are generally mobile so can move in and out of the target area.

130. The analysis of the socio-economic data undertaken by the international research team, found very little evidence that the scheme had affected various livelihood outcomes. There were no significant impacts on measures of assets, incomes, and consumption expenditures, or loans and savings behaviour, although there was some evidence to suggest that some child health outcomes improved (e.g. child reported sick with malaria or diarrhoea in previous 30 days). However, the period of time over which effects could be recorded (the length of the PES scheme) was relatively short and if the Project had run over a longer period, say 5 years, impacts may have improved and become more noticeable (and shown statistical significance). Unfortunately, there are no direct plans (or funding) for extension of the research or follow-up monitoring work at the moment.

131. There was also no statistically significant trend in deforestation or forest regeneration discernable in treatment areas compared to controls from the analyses of the ecological data. According to the researchers, the 'modest uptake' of the scheme reduced the potential for analysis and to detect impact (low sample size, therefore reduced statistical power). However, analysis of the geospatial data had not been fully completed prior to the official end of the Project and this report. This was because the analysis of changes in deforestation has required more time and resources than originally anticipated and there were no remaining GEF funds to allow the analysis to be completed. One aim was to analyse the differences in forest area at the level of individual forest owners using a subset of approximately two-thirds of land owners who allowed enumerators from the evaluation team to collect GPS information on their specific plots had not been analysed by the research team at the TE point. According to the team, including these individual level data should increase the statistical power necessary to detect differences. Also, the baseline and endline satellite images were taken at slightly different angles and require a time- and labour-intensive process to correct for shadows within the merged images.

132. Improved satellite data (Quickbird or Landsat) should enable better analysis of baseline data on forest area and conditions and how these have changed over the years (so able to search for trends) and whether the PES intervention has affected this. Consequently, it is recommended that, if possible, additional satellite images are obtained to improve the precision of the remote sensing analysis. TE interviews with the research team suggest that around US\$130,000 will be needed to complete the analysis - US\$60,000 to obtain high-resolution QuickBird images of the study area during and after the PES scheme was in place, and another US\$70,000 to cover the staff time and computing/software costs to undertake the remote sensing analysis (this would involve stitching together the images from different dates and satellites, correcting for cloud cover, etc, calculating tree cover, and converting this to biomass and CO₂ measures, all of which are labour- and computer-intensive activities). The TE understands that such an analysis should be able to provide a much more informative and definitive answer about how much

deforestation the PES program averted in Hoima and Kibaale Districts and this should be viewed as a priority recommendation.

133. In addition, other related ecological data held by NAHI and CSWCT have not been fully analysed and reported on. For instance, NAHI has data on various biodiversity variables (forest data) that would merit analysis but which were not investigated by the international research group.

134. There had been no analysis of the cost-effectiveness of the PES scheme to date presented in project reports by the TE point – understandable given that the ecological data analysis has not been completed (see above), but also because the costs of just running the PES scheme itself (design, establishment, payments, monitoring, administration, other operational costs, etc) need to be separated out. It would be useful to know how cost-effective the Project's PES scheme has been in terms of the (marginal) benefits for biodiversity conservation (the degree of reduced deforestation and increased regeneration per hectare (compared to the controls) that was achieved per US Dollar spent) compared to alternatives, such as establishing public or community managed protected areas from the remaining forests. It would also be important to compare it's 'effectiveness' with other PES schemes (which has not been adequately covered in reports but it was to be addressed according to the ProDoc). This information was not available to the TE.

Recommendation 1. *It is recommended that the analysis of the spatial data is fully completed. Other data sets, such as the biodiversity monitoring data held by NAHI, and data sets held by CSWCT should also be fully explored. In addition, it is recommended that a costs-benefit analysis of the scheme, e.g. costs/hectare of (the marginal) reduced deforestation achieved through the scheme, is undertaken as this would be valuable for comparison with alternative biodiversity conservation approaches including other types of PES schemes. **Responsibility:** International research team to raise the funds, with UNEP and GEF providing support in identifying the additional funds needed, and research team to complete the analysis, with support from NEMA and CSWCT. **Timeframe:** Before end of April 2016.*

135. It is also suggested that the Project's Final Report is updated to include these findings when these analyses are complete.

Output 3.2: Possible sites for replication of most effective payment scheme(s) identified

136. No specific sites were identified for replication of PES scheme by the end of the Project (there has been no national analysis of this to date). However, many villages in the control group were asking/expecting to join the treatment group. In addition, the Project has encouraged uptake of the model by other organizations that are applying it to other sites and experiences from the Project have been fed into several other PES initiatives (see section 2.12.5).

Output 3.3: Synthesis and publication of project results in leading peer-reviewed journals and presentation of project results at key regional and global forums

137. A communication strategy was developed under Component III to coordinate the delivery of its activities and outputs and ensure effective dissemination of project results and lessons, and its execution has been generally very successful.

138. NEMA and PMU have presented results and shared lessons on the PES Project at several meetings and workshops, e.g. the Project made a presentation to the inception workshop of the WWF Rwenzori project in June 2014, as well as hosting a UNDP Ecosystem Based Adaptation project team on a lesson-learning trip in March 2014 which aimed to collect good practices examples of PES implementation to facilitate replication by the UNDP team in the Mt. Elgon Region of Uganda.

139. The Project has produced many articles, reports and publications, which have been distributed through various project reports and partner newsletters, television and radio, as well as being posted as articles on partner websites, including NEMA, CSWCT, NAHI and IIED, IPA and the Katoomba Group³², and the team has given a number of presentations on the results and experiences of the Project at several national and international meetings (see Annex 8). To date, most of these have been on the Project's design and implementation or progress reports rather than its full results. This is largely because publication of the research findings from the Project has been preliminary and inconclusive and further analysis of the research data, especially the ecological data, is needed (see section 2.10.1 and 2.11.1).

140. Preliminary results of the analysis of the research data on the PES scheme were presented by the international scientists during the final PSC meeting held in August 2014, and critiqued by its members. However, at the TE point there had been no publication of the research results in a peer-reviewed journal as the analysis was deemed too incomplete to be able to draw any firm conclusions (see above). It should be noted that the research team is committed to seeing the results fully analysed if additional funding can be found, and it is expected that once the remaining analyses are complete more presentations and publications in articles in peer-reviewed science or economics journals will result.

141. A good attempt has been made to capture the lessons and experiences from developing and implementing the Project, some of which are reported in the Project's Final Report. However, while this is a good list of lessons learned (one of the best the evaluator has come across for a GEF project), there is still a good deal of the knowledge and experience on designing and operating a PES scheme and the research element that has not been fully captured in reports, and some results are only available in difficult to access unpublished reports, which reduces the potential for knowledge transfer and lesson learning (e.g. to other governments and NGOs interested in developing PES schemes across East Africa). For instance, useful information on how to determine the level of payments for a scheme, engage PFOs, negotiate contracts, arrange payments to locals who do not have access to bank accounts, operate a community monitoring system, design and implement scientifically credible research to test a PES scheme (treatments and controls), as well as lessons on some of the Project's failings, such as engagement with private sector buyers (lack of commitment and reasons why) should all be fully captured as they would be useful in designing future schemes. The TE also heard some interesting experiences and illustrative 'stories' from the individual PFOs on how they benefited (or not) from this Project, and what they valued which often differed from those at national and international level (see Annex 7). Similarly, the research element of the project would benefit from a specific lessons-learning exercise, focused on the research design and operation, especially as this project has had a higher research focus than any previous UNEP-GEF project. For instance, guidance for future UNEP-GEF projects on minimal samples sizes in research projects, other requirements, limitations and constraints on research design and resources needed would be useful.

142. Consequently, the TE feels that the Project would benefit from a wider and more structured lesson learning exercise (ideally run by an external (non-Project) facilitator), that could be organized as a 1-2 day workshop involving the main stakeholders, and that would result in a specific Project publication, which could help guide others considering designing and testing PES schemes themselves and could inform the development of the proposed PES Guidelines under consideration by NEMA (see section 2.11.2). Also, there are studies and experiences by other actors that should be considered in the development of the publication, e.g. the research undertaken by Dr A. Namara (see section 2.11.1).

Recommendation 2. *It is recommended that a 1-2 day structured lesson-learning workshop is organised with leading partners (CSWCT, NEMA, PFO groups, researchers, IPA, NAHI) and other interested parties such as UNDP and IUCN, to review and fully capture the wide range of results, experiences and*

³² <http://www.nemaug.org/index.php/projects/current-projects>, http://ngambaisland.com/conservation/payment_for_eco.html, <http://www.natureharness.or.ug/content/albertine-forests-corridor-pes-project>, <http://www.iied.org/paying-local-communities-for-ecosystem-services-chimpanzee-conservation-corridor>, <http://www.poverty-action.org/project/0258> http://www.ecosystemmarketplace.com/pages/dynamic/article.page.php?page_id=9067

*lessons learned from the PES scheme and research element, covering their design, establishment and operation, as well as lessons from attempts to assess its effectiveness and impact and integrate research as a key element into GEF projects. A key deliverable should be a specific publication (case study) to promote the Project's findings more widely and facilitate their uptake by others. **Responsibility:** CSWCT, NEMA, international research team, PFO groups from Hoima and Kibaale, independent facilitator, associated project partners, and with (non-financial) support from UNEP (ESEU, DEPI). The private sector partners involved in the Project expressed an interest in providing some co-financing for this deliverable and should be approached for funding for the event, including Tullow Oil and Hydromax. **Timeframe:** Before end March 2016.*

143. The overall rating on the delivery of Project's outputs is **Satisfactory**.

2.11 Effectiveness: Attainment of objectives and planned results

2.11.1 Achievement of direct outcomes as defined in the reconstructed ToC

144. GEF projects aim to achieve outcomes that lead eventually to the desired changes and impact. Consequently, the evaluation of the Project's effectiveness is based on the extent to which the project's outcomes, as defined by the reconstructed ToC developed for the Project, were achieved.

145. As mentioned previously, analysis of some of the ecological data is still outstanding. The assessment of the outcomes presented below is based on information gathered during the TE interviews, a document review, and a summary of the results presented by the research team to date, with the (numerical) figures presented below largely taken from the (unpublished) 'impact assessment report'.

Immediate Outcome 1: Reduced deforestation and increased forest regeneration in patches of forest targeted by the Project in Hoima and Kibaale districts of Uganda (improved local biodiversity status in target area)

146. There were very high rates of forest loss in the target area in absence of the PES scheme. However, the initial analysis of the biodiversity data collected from the PES scheme suggested that the treatment group may have slowed down the rate of deforestation, as shown by the distribution of the percent change in forest area in treatment villages compared to that in the control villages and point estimates (the rate of deforestation was 1.64 percentage points lower in treatment than in the control villages), but the result was not statistically significant and (to date) the data analysis has not been able to rule out the conclusion that the Project may have had no overall impact on forest cover. The view of the international researchers interviewed is that it is "not possible to say" that the PES scheme has a significant effect on deforestation and regeneration.

147. However, self-reported measures by the PFOs from survey data suggest that deforestation on private forest lands has decreased in the treatment villages compared to control villages. The majority (60%) of the PFOs in the treatment villages reported that the scheme reduced their tree cutting behavior (self-reported tree cutting reduced by 12.6 percentage points in treatment villages relative to control villages where 46.7% report tree cutting) as a result of the PES contract. PFOs in treatment villages reported a significant reduction in: cutting any trees for charcoal or timber; clearing any large trees in the past three years; clearing large trees because s/he wanted money; or, clearing large trees for construction or agricultural purposes.

148. Individual-level data indicates that PFOs in treatment villages were also significantly less likely to allow others open access to their land, e.g. for collecting firewood, (PFOs reported reducing access by other people to their forests with a reduction of 16.2 percentage points in treatment villages relative to control villages, where 42.1% report allowing others). There were also increased levels of patrolling of their forests to reduce illegal logging and encroachment in order to 'protect' their payments under the scheme.

Together these suggest an increased level of responsibility for the management of their forests and increased private use.

149. Although self-reporting by PFOs cannot be taken as definitive evidence of reduced deforestation there does seem to have been less cutting by those PFOs with contracts as payments were dependent on compliance (as judged by the Community Monitors during field visits). Given that the vast majority of PFOs in the treatment group complied with the conditions of their contracts to a large extent it would have been expected that there would have been a reduced deforestation rate (and a likely increase in natural forest regeneration) among this group compared to the control group who were offered no financial gain³³. However, this has not shown up on the analysis of satellite images (see above), which may be due to the efficacy of the satellite data to show significant changes in forest cover and regeneration over the brief 2-year period of the scheme, and the fact that only some tree size classes were protected while others were allowed to be cut, which is likely to complicate the picture on regeneration.

150. The degree of difference between the PFOs in the treatment and control villages may not have been large due to 'contamination' of the PFOs³⁴. There was a high background level of self-reported patrolling in control villages (the 'impact assessment report' states that 40% of PFOs in control villages reported "increasing the level of patrolling the forest in the last two years"), which may have been due to awareness raising and sensitization from previous projects and from communication with people participating in neighbouring treatment villages. Many of the PFOs in the control villages may not have cut down their forests either because they were expecting payments at some point in the future – either through joining the PES scheme itself or another initiative. Individuals in the control group interviewed by the TE had already been sensitized about the advantages of conservation through previous initiatives in the area, e.g. work by JGI, and saw opportunities for future payments.

151. It should be noted that there was also evidence that some of the local PFOs were less inclined to cut down trees in their forest patches anyway ('inframarginality') as they already saw value in maintaining the forests (this awareness gained from previous education initiatives undertaken by the CSWCT and other NGOs). The research team did not consider this to be a serious problem, but it was not clear how big a factor this actually was as it was difficult to assess, and was mentioned by some PFOs during the evaluation interviews.

152. Whether the PES scheme has increased forest regeneration is more difficult to determine as trees generally take years to grow and growth rates can be affected by drought, floods, pests, or other external environmental factors which may not be uniform across a region. The survival of seedlings planted under some of the PFO management plans was poor initially but improved (20% in 2011, 27% in 2012, and 48% in 2013), which could have been because of external factors rather than PFO actions. The consensus from interviews was that allowing natural regeneration was preferred to reforestation through tree planting by the PFOs.

153. Overall, the Project achieved improved management of 1,269ha of private forests, although this is less than the contracted 1,642ha (72%) due to reported challenges mentioned above (and see section 2.10.1).

Immediate Outcome 2: Adoption of PES approach as an alternative livelihoods option among PFOs and local communities in the Hoima and Kibaale districts (improved sustainable livelihood opportunities for PFOs in target area)

³³ Assuming the rate of deforestation between the treatment and controls was the same at the beginning of the scheme and the control group PFOs had not changed their behaviour in relation to their forest patches.

³⁴ For instance, there was some evidence that on-going discussions on the proposed Murchison-Semliki Landscape REDD+ project, led by WCS, may have led locals to expect carbon payments for maintaining their forests in future, and so be more receptive to protecting them.

Perceived value of and attitudes towards the PES scheme

154. As noted above the majority of the PFOs in the treatment group completed the two years of their contracts and received payments, suggesting that they saw the scheme as a potential livelihood opportunity. Indeed, there has been increased interest in the PES scheme as the Project has progressed and some PFOs not previously involved expressed a much greater interest in joining the scheme, and according to interviewees (both MTR and the TE), many in the 'control' group were 'waiting their turn' to be included in a payment group. The MTR report also notes that subsequent to the first round of payments to PFOs under the scheme, some PFOs were requesting to add more forest area under the scheme. In addition, one of the larger landowners claimed he had even invested some of his own money (a good indicator of commitment to the PES idea) to purchase plants seedlings. According to the Project's survey data, among the PFOs in treatment group 60% reported they were (very) satisfied with the scheme, 9% neutral, 31% unsatisfied, and with an even higher proportion of 92% reporting interest in a similar future scheme. Among PFOs who knew of the scheme but did not sign contracts, 63% reported that they 'would sign (such a) contract today under the same terms'. However, awareness and positive attitudes towards the forests were reportedly lower in the Kibaale District which probably reflects the previously lower levels of outreach by the CSWCT, JGI and others in this area. Consequently, there was high interest in having the scheme continue among the PFOs.

155. The money generated from the contracts was seen as valuable by the PFOs. Some used it to pay for installing fences to reinforce their ownership of the area under contract or for house building, others as a contribution towards the education of their children or to pay for medical bills or general family expenses (which benefited women and children especially). However, it should be noted that none of the PFOs questioned by the TE relied on the PES scheme payments as their only source of income as all had other areas of land (not covered in the contracts) on which they could grow food for their family so the PES Project contract was not the sole source of income for the PFOs.

Other benefits supporting adoption of the PES approach

156. Interestingly, the monetary incentive was seen as only one of a number of motivating factors to join and remain with the PES scheme. Other reasons given by PFOs for signing up to the PES scheme included: curiosity about what opportunities it might offer as an alternative money making venture; an existing pro-environment attitude; and particularly the opportunity to strengthen individual land ownership rights³⁵ through the Project's contracting process. The PFOs also valued the forest management advice provided by the Community Monitors, and the offer of free seedlings, notably fruit trees and species that could be used for charcoal and timber, were also seen as benefits by the PFOs.

157. PFOs previously had *de facto* rights to the land around the villages but more formal contracts were deemed necessary to give potential buyers confidence that the ES could be delivered by those claiming ownership of the resource. However, the contracts themselves were viewed of value by a number of the PFOs interviewed by the TE because they helped to clarify and strengthen ownership rights (negotiated with local village Council leaders and not formal legal land titles although nevertheless seen as important). Thus a contract was seen as evidence (a tool) to help 'prove' ownership and reduce encroachment. Consequently, there has been a change in the perception among PFOs that the forest now belongs to them even if they do not have officially registered land titles. These contracts also had the effect of generating a greater sense of responsibility for the management of the land among their 'owners'. In addition, it has meant that the PFOs had begun to consider harnessing the forest resource more widely and investing more in its management as the 'investment' was seen as increasingly secure.

³⁵ A survey during the PPG phase found that 97.2% of the forest owners were on a customary land tenure system with only 2.8% having registered land titles.

158. Other perceived benefits from the scheme which promoted its uptake mentioned by PFOs interviewed by the TE included: greater amount of water in catchments (“streams are no longer so dry”) which is important for their livestock³⁶; improved supply of medicinal plants (Western medicine is not affordable and to some extent the forests can be seen as providing an important part of the local ‘health service’) and other employment opportunities, e.g. ecotourism. Interviewees also mentioned the chance to meet other people (so the social dimensions of the Project were important) and a common shared aim, was obviously important as well.

Lesson 2. Although financial payments are important, landowners can value other less direct and non-monetary benefits. The importance of these additional benefits should not be underestimated and should be fully explored, with mechanisms to maximize other benefits considered during the PES scheme’s design phase.

159. It should be noted that improved conservation of forests in the target area is likely to potentially benefit women more directly than men as women shoulder most of the responsibility for collecting fuelwood and water for their families, for which the remaining forest patches provide essential supplies, and loss of local forests means that women have to travel further to collect these which impacts on their time and energy (and indirectly on their families). Consequently, the fate of these forests is of particular concern to women.

160. Although initially a lot of local people showed interest in being involved in the scheme, some PFOs were cautious. This was due to variety of reasons, including: too low a payment; the land not belonging to them; household dynamics (difference of opinion within the household about joining scheme); uncertainty over what to expect and the ‘hassle-factor’ (human inertia); fear of being tied to a contract; suspicions over the contracts and motives of the Project particularly given the concern in the region about land grabbing by outside bodies (heightened by the recent discovery of oil in the Northern Albertine Rift)³⁷; and the issue of vermin (pressure from their neighbours not to join the scheme – see below). Most of these concerns were expressed by the smaller landowners, who were the majority of those who dropped out of the scheme.

Current interest in the scheme

161. Although the above benefits have encouraged PFOs to sign up to and stick with the scheme, the scheme is currently suspended as there are no funds to pay the PFOs to continue their contracts. Surprisingly though, according to project reports, most of the PFOs in the treatment group (and all those interviewed by the TE) had continued to manage their forests according to the management plans³⁸ set out in their contracts even though the contracts had now lapsed (so had effectively adopted the PES scheme, at least in the short term, but without any confirmed buyer!).

162. However, there were significant costs associated with involvement with the scheme for the PFOs in the treatment group - opportunity costs (loss of potential income from the timber, charcoal, and clearing the land for rice and tobacco), and other costs from loss of crops due to vermin (see below) - and the level of payment – UGX70,000/ha/year – was considered too low to compensate for these. Indeed, it was pointed out to the TE that a single large tree could be worth as much for its timber as the annual payment

³⁶ One farmer reported that where his forest had regenerated water flow in the river had increased which meant his cattle didn’t have so far to travel for water and this had reduced his veterinary bills.

³⁷ Some of the initial hesitation among locals was because the Project was associated with the CSWCT and there was a concern over whether the Project would bring more chimpanzees to the area (chimpanzees are seen by some as ‘problem animals’ that raid crops and can attack young children). There was even a suspicion that the scheme was a veiled ‘land grab’ by conservation groups seeking to establish a protected area for chimpanzees.

³⁸ The contract management plans were designed for a 10-year period on the expectation that follow-up funding would be available.

to a small landowner under the scheme. It is not clear therefore, how many PFOs will continue to implement their management plans given the need to make a living.

Negative issues

163. There were a number of unintended negative consequence of the PES scheme that generated a certain amount of conflict locally and threatened the wider uptake (and sustainability) of the scheme. One of these was the exclusion of non-PFOs³⁹ from land held by PFOs in the treatment group in some villages, particularly over the collection of fuelwood and water from land that prior to the Project had been essentially 'open access'. This created social divisions and conflicts between PFOs and non-PFOs and increased tensions in some villages. Although the Project tried to minimize this by agreeing to fuelwood collection within contracts and management plans, some of the PFOs still excluded others in order to minimize the risk of illegal timber extraction or cutting (which would potentially put their payments at risk). For those non-PFOs in treatment villages who are not able to access other areas (perhaps due to distance), this has meant the PES scheme has caused them hardships. Consequently, benefits from the PES scheme have been mixed at the community level.

164. Also, this 'exclusion' by some PFOs has meant that at least some of the non-PFOs individuals in treatment villages had to search for fuelwood, timber, etc, in forest areas outside the treatment areas, so some of the expected deforestation and forest degradation may have been displaced to other forest areas, although the extent to which this happened is unknown as it was not directly measured by the Project.

165. Another conflict that reduces the likelihood of adoption of the scheme has been (apparently) increased populations of vermin⁴⁰. The accusation is that the remaining forest areas act as refuges for baboons, monkeys, chimpanzees⁴¹ and pigs that raid crops, and the scheme was helping to maintain these patches. This has created tensions in some treatment villages (there were even unsubstantiated reports of neighbours attempting to burn down forest belonging to PFOs in the treatment group). According to TE interviewees, the 'vermin issue' has still not been adequately addressed⁴², and this issue was not properly considered at the design stage.

166. If the above issues are not addressed increased local poverty, deprivation and inequality and social tensions within the target community may result. Indeed, it is suggested that a social impact assessment is undertaken as part of any PES scheme design process to identify likely negative impacts. PES schemes also need to consider integration of activities that can promote greater sharing of the benefits at the community level, which could include installation of water pumps and creation of community woodlots or establishment of some form of community fund, as well as the integration of a human-wildlife conflict management strategy and plan (with funding) into the PES scheme design, where it is an issue.

Lesson 3. PES schemes can have unintended consequences that can create social problems and divisions which if not addressed can lead to increased local poverty, deprivation, inequality and social tensions within the target community.

³⁹ The richer members of a village generally own the forest land so these are usually its poorer members.

⁴⁰ IPA measured attitudes towards wildlife, including towards vermin, before and at end of the Project but these are not reported on in the Project's Final Report. The TE understands that the IPA has the data but it needs to be analysed and fully reported on.

⁴¹ There have been some attacks by chimpanzees on local children in the Project area in the last few years, mostly occurring during the dry season when chimpanzees can come into villages looking for food, and in areas where there had been a lot of deforestation (small forest patches). However, most of the crop damage is considered to be caused by baboons.

⁴² The PMU developed a human-wildlife conflict management protocol in collaboration with the Uganda Wildlife Authority (UWA), although funds were not available for its full implementation.

167. Overall, the above findings suggest that although the PES scheme has not been formally adopted by any of the PFOs in the target area on a long-term basis, the fact that many have continued with their management plans after funding finished and many more are keen to join such a scheme suggests that a significant number of PFOs would adopt the PES approach as an alternative livelihood option if payments were continued. However, the influence of the sources of conflict mentioned above should not be underestimated, and unless solutions can be found to deal with them, e.g. provide an alternative source of fuelwood and water who have lost access to resources (the non-PFOs), it is likely to impact future adoption and sustainability of any PES scheme in the Hoima/Kibaale area and wider take-up of the PES approach for protecting privately owned forests in Uganda.

Immediate Outcome 3: Increased number of national and community level stakeholders (from diverse sectors and from strategically placed institutions) able to design and implement PES schemes (strengthened local and national capacity for PES and SFM)

Targeted capacity building efforts

168. The Project has built the capacity of key stakeholders at both national and community levels in how to design and implement PES schemes through specific training courses and on-the-job training (see section 2.10.2). Community Monitors, in particular, have gained greater experience and skills in monitoring, forest assessments and tree planting, which has been passed on to PFOs and helped build significant community level monitoring, which is another major achievement of the Project. Some PFOs themselves have also received training directly from the Project. Although there were no indicators to gauge whether the trainees' new knowledge and skills had been retained and employed in their decision-making towards supporting PES⁴³, judging from the TE interviews, PFOs are certainly better informed of the technicalities of PES, and the capacity building of the Community Monitors and PFOs can be considered successful in that the great majority of the PFOs in the treatment group remained with the Project and delivered on their contracts (even after the GEF funding finished).

169. There has also been a significant increase in capacity within NEMA. A good number of the technical staff within NEMA were involved in the Project, including personnel from the soil and water, economics, biodiversity, and legal departments. This increased capacity has been reflected in the success NEMA has had in getting the PES approach mainstreamed into various national policy and planning documents (see section 2.11.1). However there is still no officer within NEMA that is specifically tasked with dealing with PES issues (a PES Officer) and there are still only a small number of staff who can evaluate ecosystem services and design payment for ecosystem services models.

170. In addition to the training provided by the Katoomba Group, the Project has also helped build the capacity of NGOs in Uganda. For instance, staff members employed by WWF-Uganda have used the knowledge gained from the PES Project trainings to help design their own PES projects, and former members of the CSWCT who were involved in the project have also joined other NGOs and taken that capacity/knowledge with them. Although not a direct aim of the project, this capacity building effort was considered extremely important by those NGOs interviewed by the TE.

171. Feedback from TE interviews suggested that additional training and awareness-raising would have been useful. Specific requests were received for more training on reforestation using native species (as there was uncertainty on how best to care for them – needs for *Pinus* and *Eucalyptus* are well known), and there was a call for more local government staff (District, Subcounty and Parish levels) and to be included in training (which would also help support sustainability). It would perhaps have been more effective if the capacity building effort had been organized as a series of workshops (rather than one-offs – see section 2.10.2) repeated each year to ensure more people could have been trained to increase the likelihood of capacity being retained within the key institutions as staff moved on to other jobs.

⁴³ The Katoomba Group did assess the level of knowledge immediately after the training workshops but it is unclear to what extent the participants have used this new knowledge in their own work 2-3 years after the training.

172. However, evidence suggests that, among the private sector participants, the capacity building had a much more limited influence and impact in that despite their involvement in the Project no private sector company signed up as a buyer during the GEF project, and at the TE point there were still no confirmed private sector buyers for any ecosystem services provided by the Project area's forests (see X.X). A single one-day training event was probably too short to expect significant change.

173. Some additional, leverage funding raised from the UK Darwin Initiative through the Project enabled further capacity building including training of 140 forest owners in forest based enterprises to enhance benefits from the scheme and demonstrate its long-term commitment, and some capacity building activities have continued following official closure of the Project, with a joint IIED and Ecotrust workshop on monitoring in March 2015, funded by ESPA.

Additional institutional capacity building efforts supporting adoption of PES

174. Interestingly, the District Forest Officer (DFO) for the Hoima District has come to see the Community Monitors (and the PMU generally) as an extension of his office ("my helpers") and providing extra capacity. The District Forestry Office consists of the DFO himself, one ranger and one forest guard and has no independent vehicle for the District so it is hugely understaffed and under-resourced. For instance, the Community Monitors were considered especially helpful as they had close relationships with the local community and provided much useful information on the local environmental situation to the District Council's officers. The DFO has been trying to encourage locals not to cut forest within 50m of a river (meant to be 100m) but has little money for enforcement and the Project has helped to promote this message particularly through its payments to PFOs in the treatment villages, and the presence of the Community Monitors on the ground is believed to have reduced the cutting of these forests. In a sense then, the Project has been seen as an independent, separately funded extension of the DFO for some issues, although the relationship between the Community Monitors and the District authority was an informal one.

175. The PMU team also participated in District and sub-county technical planning meetings under the auspices of local government and PES-related updates were given to technical staff at district and Subcounty levels. As a result, the District Council now has more expertise on PES and understands its potential as a mechanism to deliver better forest management.

176. However, an independent assessment of the effects of the GEF Project on governance, community conservation and gender issues, undertaken as part of a study⁴⁴ under a Responsible Forest Governance Initiative (funded by CIDA through CODESIRA) that was investigating governance in areas targeted for REDD+ to see how interventions have affected the governance of natural resources found contradictory evidence, and the situation is clearly more complex. The main concerns of the study were over the degree to which NGOs, including the CSWCT, were involving the District level authorities and the overshadowing of the local government by NGOs, and that a greater targeted effort should have been put into building the capacity of the local government structures. Interviews for this study revealed, in contrast to those of the TE, that the District level officials were critical of the Project. They were particularly concerned about protection of the riverine forests in the Hoima area which, legally, are held in trust by local government.

Immediate Outcome 4: Increased awareness and understanding of the value and effectiveness of PES for addressing both forest BD and local socio-economic issues, and ensuring supply of critical ecosystem services among public and private sector stakeholders (raised national awareness on value and operation of PES approach)

⁴⁴ Namara, A. (2014). At the Expense of Democracy: Payment for Ecosystem Services in Hoima District, Uganda. Responsible Forest Governance Initiative Final Working Paper. November 2014. 38pp. The study focused on representation of local government (District, sub-county and parish levels) and community groups in the Project, decision-making process (who was involved and who was not, and how), and impact issues, and took place between April 2012 and December 2013, between the first and second payments to the PFOs in the treatment group. Dr Namara was given access to Project meetings and interviewed many of the people directly involved with the Project.

177. A substantial amount of Project activities were geared towards raising awareness of stakeholders and the general public of the value of ecosystem services and the benefits of the PES approach (see section 2.10.3). Although there were no quantitative indicators of changes in awareness given in the Project's logframe, there have been clear increases, particularly at the local level.

178. It was clear from TE interviews that there is a good awareness of ecosystem services and their values among the PFOs in the Hoima District. They showed a clear understanding of the linkages between their forests and the services provided, claimed to be more aware of the threats from logging and charcoal extraction, and were also very aware of the value of trees as carbon stores and that the developed world is interested in paying them to maintain their forests (REDD+). It was clear that among the PFOs interviewed there was an understanding that a forest is not just a source of timber, fuelwood and other non-timber products, but it has multiple benefits and they understood that the way they use the forests has a direct effect on their lives and others. Those interviewed by the TE were clearly using the forest much more consciously than previously and making much more informed decisions about their use.

179. The use of Community Monitors to raise awareness and build capacity of the PFOs was seen as being particularly effective. Their direct intervention with local communities was regarded as important in 'selling the conservation message' and explaining and supporting implementation of the Project, as well as their other main function of compliance monitoring. This was considered one of the main factors in the successful delivery of the scheme as there was a high level of uncertainty over the Project initially due to this being the first time a PES scheme had been tried in the region, and the Community Monitors were able to provide reassurance and advice.

Lesson 4. Establishing a network of locally based Community Monitors to provide compliance monitoring and extension support for a PES scheme can help establish and maintain strong relationships with the local community, which helps to keep PFOs interested and committed. Having the trained Community Monitors based and operating locally also means that the project management has a regular presence in the communities which helps build trust in a project.

180. However, the Hoima District (more so than the Kibaale District) has had a significant amount of sensitization on the importance of forests for their survival from previous initiatives so it is difficult to state how much of the current level of awareness is due to the GEF Project activities and how much was the 'baseline' before the Project began, as these were not measured.

181. The Project has also clearly helped stimulate broader debate on PES within Uganda, especially among key groups concerned with biodiversity conservation and rural development in the target area, notably among the members of the Northern Albertine Rift Conservation Group (NARCG – see section 2.11.2). Awareness has also been raised among some national government staff although PES is still considered to be poorly known in many (non-environment) government departments and there are gaps even within NEMA, e.g. within the EIA group. This has been partly the result of the lack of structured and targeted lobbying and advocacy activities within the Project (the communications strategy was weak in this regard), and the lack of a specific GEF budget line for these activities at national and international levels to ensure take up and mainstreaming of results into policies, processes and practices.

182. However, one weakness of the Project's approach to communications was the lack of a clear vision on what research/data analysis/results would need to be produced by the researchers to convince decision-makers, and in what form they needed to be presented.

Immediate Outcome 5: Arrangement between buyers and producers for carbon and water services from land managed by PFOs in Project area secured (private sector buyers for local forest ecosystem services secured)

183. The Project was proposed as a first step to encourage a first tranche of private sector buyers to become involved in a PES scheme. The Project aimed to demonstrate how they could benefit and to encourage others to participate in either a follow-up or similar initiatives in the future. Indeed, businesses were invited to join both the PSC and TC, and one – Hydromax – pledged significant co-financing at the design stage (see section 2.14.6).

184. Unfortunately, linkage with private sector buyers was weak and underdeveloped during the project design stage and not successful during its implementation. Disappointingly, no businesses local to the two Districts were directly involved with the Project. A major weakness was the lack of a clear strategy for engaging the private sector (it tended to be *ad hoc*, based on personal contacts rather than any systematic survey, analysis and planned steps) and there was a lack of a clear (legal, financial, administrative, etc) framework for how individual companies would contract ES providers in the Hoima and Kibaale areas for delivery and maintenance of the ES. A marketing package for carbon trade and biodiversity conservation services for potential PES buyers proposed in the ProDoc also does seem to have been produced. The Project would also have benefited from a separate survey/analysis of private sector interest and dependency on ecosystem services undertaken as a background study feeding into project design during the PPG. Instead the Project made requests for grants rather than developing a structure/system that would lead to regular long-term more sustainable financial commitment.

Lesson 5. When designing a PES scheme it is important to have a very good understanding of the market for the services being addressed through the scheme, the potential to attract buyers, and to understand how to influence and link with them. Potential buyers also need to be involved from the early stages of PES scheme design (and ideally commit for a significant period, say 5-10 years) or sustainability will quickly become a problem.

185. Despite the failure to secure their financing, awareness and knowledge of PES has certainly been improved among the private sector in Uganda, and TE interviews revealed a high level of knowledge of the importance of the forests for some of the businesses involved with the Project, e.g. an adequate and regular water supply from the forests for the hydroelectric industry. However, given that no private sector buyers agreed contracts and payments for the ecosystem services in the target area, it suggests that information alone is not enough to convince the private sector to invest in the ecosystem services even if their business models are totally dependent on the continued delivery of those services. In addition, the representatives of the private sector interviewed as part of the TE viewed the Project as a pilot intended to test the idea of whether a payment (from GEF for biodiversity conservation) would lead the PFOs to protect their forests. So promoting the Project as essentially a research project probably undermined the likelihood of achieving one of its key aims to secure private sector buyers for the forest ecosystem services provided through the scheme.

186. Also, it was clear that although the private sector individuals who became involved with the Project clearly felt they had learned a lot from their involvement with the Project and had promoted the project within their companies (became ‘champions’ to some extent), they were clearly not senior or influential enough to secure funding.

The rating for overall achievement of outcomes is Satisfactory.

2.11.2 Likelihood of impact using the Review of Outcomes to Impact (ROtI) approach

187. The ROtI approach is used to assess the likelihood of impact by building upon the concepts of Theory of Change (see section 2.8). There are a number of intermediate stages/results beyond the Project’s outcomes in the causal pathway that need to occur for the realization of the Project’s final desired impact.

MTO1. Policy, legal and institutional frameworks supportive of PES approach at national and community levels in Uganda

Mainstreaming PES into national policy and legislation

188. The Project has had some success in getting the PES approach adopted as a government policy for sustainable natural resource management, which is encouraging and the Project deserves praise as it is often a challenge to get findings from research mainstreamed into policy. Consideration of the science-policy interface and how best to integrate the scientific results into decision-making processes/frameworks has not been rigorously explored by the Project (it was to be addressed through the 'replication plan' to be developed by NEMA (see section 2.10.3) once the final, fully analysed results of the Project were available.

189. The key entry point for national policy integration has been the revision of the Environmental Act and Policy. The draft Act and Policy specifically mention PES, biodiversity offsets and innovative financial mechanisms for funding biodiversity conservation, and are included in the next 5-year strategic plan. Once passed these should encourage and support the wider development and adoption of the PES approach in Uganda. According to interviewees the inclusion of these is a direct result of the GEF Project and its results, which greatly supported the NEMA team's work in anchoring the concept of PES in the Act and Policy. This represents one of the most notable successes of the Project. However, there are expected to be delays over the approval of the Act due to national elections in 2016 and the most likely date for confirmation of the new Policy and Act is late 2016 or early 2017.

190. NEMA is also discussing the development of a set of (voluntary) guidelines for the design and operation of PES in Uganda to complement the revised Policy and Act. The Project's results and experiences are clearly extremely relevant to the development of the guidelines (particularly the lessons learned). Preliminary lessons learned listed in the Project's final report could provide some initial ideas and framework on which to build the Guidelines. The identification of a PES officer within NEMA would also strengthen their development and delivery.

191. Uganda's National Development Plan is also being reviewed and NEMA is attempting to ensure that biodiversity and ecosystem services are included which will ensure greater funding for these issues in NEMA's budget for the next five-year planning period (and therefore for future PES initiatives). NEMA has produced an issues paper on environment and natural resource management as a background document for the National Development Plan that mentions PES. The project was also invited to make a presentation on its results to the group revising the NBSAP for Uganda, although it is not clear as yet to what extent the PES approach will be stressed within the updated NBSAP⁴⁵. There are also potential opportunities for greater take up of the PES approach in the water sector. For instance, the Ministry of Water and Environment is focusing on catchment protection for sewage control, which may offer opportunities to integrate the PES approach, and future reviews of the legislation and regulations governing EIAs may also integrate an ecosystem services approach. However, mainstreaming into other important sectors, notably agriculture and finance, has been much less successful, and the economic business case for PES for these other sectors still needs to be made.

192. The Project has also sought to promote its results at the District level. District Environmental Action Plans (DEAP) and District Development Plans have been targets for mainstreaming of the Project results, and the PMU/CSWCT has been invited to participate in the process of their development in Hoima District. DEAPs are revised every three years, and next one due in 2016, which offers a timely opportunity for mainstreaming. NEMA has a department of district coordination with a support officer that liaises with District level offices so there is an additional entry points to mainstream the Project results and PES guidelines (when they are produced) into the District level.

⁴⁵ During the review of the draft TE report, CSWCT noted that the situation had become clearer and that PES is stressed as an important financing mechanism for biodiversity conservation.

Strengthened institutional frameworks supportive of PES

193. As mentioned above (see section 2.10.2), the project has helped build institutional capacity for design and delivery of PES schemes in Uganda. Perhaps most important has been the changes within NEMA. Exposure to the PES Project has enabled NEMA staff to successfully lobby for inclusion of the PES approach (and awareness of the value of ecosystem services generally) within Government and particularly within the revised National Environmental Policy and Act and other national-level policy documents. According to TE interviewees, this was considered unlikely to have happened without the Project's input and it is certainly true that following its involvement in the Project, NEMA is now in a much stronger position to provide policy guidance on PES within Uganda.

194. One very positive result of the Project that has helped strengthen the institutional framework for PES in Uganda has been the creation of a forum of NGOs and CBOs focused on the Northern Albertine Rift region – the Northern Albertine Rift Conservation Group (NARCG). This was not a directly expected project outcome but arose out of meetings and discussions between key stakeholders and others to try to minimize 'contamination' of the GEF Project by other on-going conservation and development initiatives in the target area (ensuring the controls were as 'clean' as possible), which was major issue for the Project's research team during the design stage.

195. The main members of NARCG are the CSWCT, WCS, JGI and the Ecotrust, and it meets every quarter. The creation of the Group has facilitated collaboration between members on common issues, helped avoid overlap/duplication of activities, supported joint fund-raising initiatives, and provided a forum for sharing ideas (the various members are now talking with a 'common voice'), according to interviewees, NARCG has improved the effectiveness of the groups involved (although this has not been tested). Its current overall aims are to promote REDD+ and public sector involvement in PES. Those involved have been able to draw on each other's capacity and have already started to share resources and, to some extent, personnel on common initiatives. For instance, joint activities developed by the NARCG include a proposal for funding for a REDD+ project spearheaded by WCS.

MTO2. Agreements between suppliers (PFOs, local communities) and buyers (private sector, donors, government) secured for long-term investment in ecosystem services provided by forests outside of protected areas in Uganda

196. As mentioned above (see section 2.11.1), it was initially expected that private sector buyers for the ecosystem services provided by the forests would be secured by the end of the Project but this has not happened. According to TE interviews, the lack of commitment has been due to a number of reasons: pressure from shareholders to maintain and increase profits even if it means exploiting PFOs who have high opportunity costs; "the current economic climate" affecting the level of risk aversion, and whether the business itself is doing well. Thus externalities may impact whether a company buys into PES approach (at least initially).

197. Another reason appears to be that the private sector still does not appreciate how reliant many businesses are on continued delivery of ecosystem services. A detailed analysis of the benefits from maintaining these ecosystem services versus the costs from losing them for individual businesses/companies with a presentation to their boards may persuade them otherwise. In addition, an analysis showing the number of people whose employment is reliant on the forests both directly and indirectly, would further highlight the importance of the forests to local businesses and the economy, and is often of particular interest and political importance to governments.

198. Perhaps a more effective approach with the private sector would have been for the Project to work with individual private sector companies to identify exactly how they would benefit and the risks they face

from inaction to protect the forests on their business models (cost-benefit analysis) – but this would have been a different project and there were no resources for this.

199. Also an alternative entry point into the private sector may be through working with the institutions that provide finance and insurance to those businesses that are dependent on a supply of ecosystem services may offer opportunities for leverage as banks and insurers need to consider risk to their investments and therefore the risk that ecosystem services may be lost or degraded if those maintaining and managing these services are not compensated. It may also be worth making the ethical case for payments to those providing the essential ‘raw materials’ of a business (although some businesses will continue to exploit providers of ecosystem services in the pursuit of profit until regulation forces them to do otherwise).

200. There is a clear need to seek out ‘champions’ among key private sector business groups to promote PES. One of the weaknesses of the Project has been that there was little experience among the Project Management Team (CSWCT and NEMA) of dealing with the private sector, and few members of the team had a strong previous history working within business (e.g. development of a business case (which is what the PES model requires), negotiating with private sector companies, pull together a business plan, financing and involvement of the insurance sector, etc). This needs a coordinated approach and within a partnership of government, private sector and non-governmental organizations, but led by someone with strong private sector background who understands how the business community operates and has relevant experience, e.g. marketing, small business development advisor. This is something that needs to be addressed in the future to move towards this MTO.

201. However, the TE came across various other explanations for lack of private sector engagement, including the opinion that since businesses are already doing what is required under the law and pay taxes and it is the responsibility of the Government to provide the ecosystem services on which they rely, e.g. water supply; in other words, the buyer for forest protection should be central government. Consequently, there is still a major challenge to persuade private sector businesses to take responsibility for the supply of their resources, to see PES as an essential element of their business model and so build it in to their operations from the beginning as part of their business plans. The Project concept needs to be ‘sold’ more to the boards/stakeholders/investors of the businesses benefiting from the protection of these forests; in other words, the business (and ethical) case needed to be made clearer, and the Project probably needs to seek specific advice on this as neither CSWCT nor NEMA have a comparative advantage in this area.

202. The ROTI approach requires ratings to be determined for the outcomes achieved by the project and the progress made towards the ‘intermediate states’ at the time of the evaluation. The rating system is presented in Table 5 below and the assessment of the Project’s progress towards achieving its intended impacts is presented in Table 6.

Table 5: Rating Scale for Outcomes and Progress towards Intermediate States

Outcome Rating	Rating on progress toward Intermediate States
D: The project’s intended outcomes were not delivered	D: No measures taken to move towards intermediate states.
C: The project’s intended outcomes were delivered, but were not designed to feed into a continuing process after project funding	C: The measures designed to move towards intermediate states have started, but have not produced results.
B: The project’s intended outcomes were delivered, and were designed to feed into a continuing process, but with no prior allocation of responsibilities after project funding	B: The measures designed to move towards intermediate states have started and have produced results, which give no indication that they can progress towards the intended long term impact.
A: The project’s intended outcomes were delivered, and were designed to feed into a continuing process, with specific allocation of responsibilities after project funding.	A: The measures designed to move towards intermediate states have started and have produced results, which clearly indicate that they can progress towards the intended long term impact.

203. Many of the project’s outcomes were at least partially delivered (see above) and some were designed (most not directly) to feed into a continuing process that would lead to impact, e.g. Project

lessons learned on PES approach have been fed into the updating of the National Environmental Policy and Act – see section 2.11.2). However, there was little prior thought given to the identification of responsibilities, or resource needs, after project funding had finished to achieve MTOs and longer-term impact, and sustainability of project results is a concern.

204. There is no rating category for partial achievement of project outcomes, so there is no single category rating into which the Project neatly fits; it is a mixture of A, B, and C. Therefore, **rating of progress towards Outcomes has been ‘averaged’ and is rated “B”**.

205. Given the generally positive response to the PES scheme from local participants, there do not seem to be any obvious constraints to the wider adoption of the PES scheme in Uganda, although lessons learned need to be fully extracted first as there may be some site-specific features of the model, that might not be transferable to other localities. For instance, it is noted that opportunity costs and costs from loss of crops from vermin that were attributed to retaining forest areas were much higher than the actual payments. So whether the model will be replicable to other areas will, in part, depend on the balance between these costs and the financial payment offered, and if the issue of sustainable financing can be solved (see section 2.12.2).

206. However, as noted in section 2.8, there are also a significant number of assumptions and drivers and that may impede or enhance the likelihood of the Project’s immediate outcomes and intermediate states being reached and the eventual achievement of the Project’s desired impact.

207. Unfortunately, the risk that short-term profits from destructive activities, e.g. conversion of forest to tobacco and rice, will not outweigh profits for maintaining ecosystem services is always a risk when following a market-based approach. However, this risk could be lessened if a multi-ecosystem service PES model⁴⁶ was adopted, as relying on payments from one or two ecosystem services is clearly higher risk than combined payments from a diversified ‘portfolio’ of ecosystem service schemes. Different PFOs would offer different levels of ecosystem service (e.g. those with larger forest blocks would have more potential for chimpanzee or bird tourism) so there would need to be some form of collective approach and agreement, perhaps through a cooperative arrangement (through the PFO associations⁴⁷), to ensure that those with smaller areas of forest can still benefit, e.g. from payments for water supply. The Project originally envisaged potential buyers for carbon and (to a lesser extent) water services by the end of the GEF funding that would be able to fully fund the maintenance of the forests. However, this did not happen.

208. In terms of drivers, there has been increasing awareness of the economic values of ecosystem services and interest in developing markets for ecosystem services in Africa and globally, particularly watershed services for maintaining water supply and quality, and cultural and recreation services, such as ecotourism. Most of the Project’s partners, notably CSWCT, WWF and WCS, have well-developed awareness-raising programmes that look to promote PES and UNEP itself is very active in this area particularly at the global level e.g. through individual PES projects and other initiatives to integrate ecosystem services into the financial sector and its Green Economy programme (see section X.X). These should all help to support the delivery of the MTOs.

⁴⁶ Indeed, UNEP’s EMSP promotes the ‘bundling’ of ecosystem services rather than treating them as separate and independent services.

⁴⁷ The PFO associations offer advice on conservation and forest management, provide a credit savings arrangement/facility, and offer subsidized free tree seedlings. Members pay a fee (in one case 10,000 shillings/year). They aim to unite and empower the owners (to have ‘one voice’), work together for common aims, to assist PFOs to earn a living (through the micro-credit facility), and improve their knowledge and skills on forest conservation. Some PFO association members were involved the Project but not all PFOs involved were members of a PFO association. There are five PFO associations in Hoima District, but during the Project’s lifetime these were mostly dealt with by the JGI rather than the CSWCT in order to minimise contamination. Representatives of the two PFO associations interviewed by the TE, reported that most of their members had only small plots of forest (2-3 ha).

Table 6: Overall Likelihood of Achieving Impact

Results rating of project entitled: Developing an Experimental Methodology for Testing the Effectiveness of Payment for Ecosystem Services to Enhance Conservation in Production Landscapes in Uganda							
Outputs	(Immediate project) Outcomes	Rating (D - A)	Medium-term outcomes (MTO) and Intermediate states (IS)	Rating (D - A)	Impact (GEB)	Rating (+)	Overall
<p>Component 1</p> <p>A pilot PES scheme designed and baseline data collected</p> <p>Monitoring schemes to oversee the maintenance of biodiversity and payment compliance established and national partners trained in their use</p> <p>Pilot PES project delivered</p> <p>Component 2</p> <p>Local resource users trained in the application of land uses to maximize biodiversity maintenance</p> <p>Decision-makers and technical staff in government, universities, and NGOs and private sector trained on PES including methods of valuation, as well as conditionalities of different payment schemes</p> <p>Component 3</p> <p>Project lessons synthesized on developing and using a PES approach to (a) reduce deforestation and biodiversity loss and (b) cover local associated costs with maintaining biodiversity, communicated widely, including to key government agencies and private sector</p> <p>Statistically robust data demonstrating whether the PES model delivered overall positive benefits, or not, in the project area,</p> <p>Comprehensive data and analysis on whether the PES pilot design and methodology can be used to demonstrate the effectiveness of payment scheme more widely</p>	<p>IO1. Reduced deforestation and increased forest regeneration in patches of forest targeted by the Project in Hoima and Kibaale districts of Uganda (improved local biodiversity status in target area);</p> <p>IO2. Adoption of PES approach as an alternative livelihoods option among PFOs and local communities in the Hoima and Kibaale districts (improved sustainable livelihood opportunities for PFOs in target area);</p> <p>IO3. Increased number of national and community level stakeholders (from diverse sectors and from strategically placed institutions) able to design and implement PES schemes (strengthened local and national capacity for PES and SFM);</p> <p>IO4. Increased awareness and understanding of the value and effectiveness of PES for addressing both forest biodiversity (BD) and local socio-economic issues, and ensuring supply of critical ecosystem services among public and private sector stakeholders (raised awareness on value and operation of PES approach); and,</p> <p>IO5 - Arrangement between buyers and producers for carbon and water services from land managed by PFOs in Project area secured (private sector buyers for local forest ecosystem services secured)</p>	B	<p>MT01. Policy, legal and institutional frameworks supportive of PES approach at national and community levels in Uganda</p> <p>MT02. Agreements between suppliers (PFOs, local communities) and buyers (private sector, donors, government) secured for long-term investment in ecosystem services provided by forests outside of protected areas in Uganda</p> <p>IS1. Improved protection of forest patches and associated biodiversity between PAs in Uganda, together with significant social benefits</p>	B-C	<p>Reduced and reversed forest biodiversity loss and degradation outside PAs in Uganda</p> <p>(project goal - enhancement of Biodiversity Conservation in Production Landscapes in Uganda and globally)</p>		BC

	Justification for rating:		Justification for rating:		Justification for rating:		
	<p>The project's immediate outcomes were only partially delivered. Some will feed into continuing national policy and legal processes after project funding closes. NEMA is leading on these. There is no single rating category that accurately reflects the delivery of project outcomes.</p>		<p>Some measures designed to move towards mid-term outcomes and intermediate state have started, and produced initial results although whether they will have impact is not clear, especially whether they can encourage the private sector to buy into PES approach.</p>		<p>Project has only achieved very local, small scale, (not statistically significant) changes in environmental status, although it was never intended to produce wide impact during the Project's lifetime</p>		

209. Similarly, international negotiations on limiting greenhouse gas emissions and development of associated carbon payments schemes e.g. REDD+ schemes, are envisaged as a major future funding source for PES schemes that include carbon sequestration and mitigation and an important driver supporting greater uptake of PES within policy and institutional frameworks. UNEP, the GoU, IIED and many other project partners are all involved to differing extents in these discussions and negotiations. Also, the new Sustainable Development Goals (SDGs), contain forest-related targets, with forests explicitly mentioned in SDG 15⁴⁸ and multiple functions of forests are also explicitly recognized in one of the targets for SDG 6 on sustainable water management⁴⁹.

210. In conclusion, progress towards intermediate states has started. It has been particularly helped by the fact that NEMA has been playing a major role in updating the National Environmental Policy and Act (and other national policy and legal processes) which has provided the opportunity to mainstream the Project results, and it is also looking to develop a set of formal guidelines for PES in Uganda that should facilitate uptake of PES approach across the country and encourage greater engagement by the private sector. **Rating of progress towards the Intermediate States is rated “B-C”.**

211. The Project has not achieved significant documented changes in environmental status during its lifetime (only on a very local scale and these have not been shown to be statistically significant), and is unlikely to achieve these in the immediate future as many other factors have to be met for the desired environmental impact (the reversal of loss and degradation of forest biodiversity outside of Uganda’s PA system) to be achieved. Consequently, the Project merits a final rating of **“BC”, equivalent to moderately likely.**

The project is considered “Moderately Likely” to achieve impact.

2.11.3 Achievement of the formal project objectives as presented in the Project Document

212. The Project’s objective, given in the ProDoc, was to ‘test the effectiveness of PES as a viable means for financing and procuring biodiversity conservation outside protected areas in Uganda using an experimental methodology’⁵⁰. Thus the Project’s objective as stated is simply that the Project should deliver and test a PES approach in the context of the forested area of Western Uganda – in other words, the objective is formulated as it would be for a pure research project and it says little specific about any desired environmental, social or economic changes or impacts. Within this strictly limited context, the Project can be said to have largely achieved its objective in that a PES project was designed, implemented and delivered following a research modality (experimental methodology), the results of which have been analysed to examine differences between treatment and control groups (see section X.X).

213. However, the indicator for gauging achievement of the Project objective given in the logframe is ‘Statistical analysis of relevant parameters show that the results are conclusive on whether experimental land owners performed better than the control group’, but the analysis up to the TE point had not been able to provide any statistically significant conclusions on whether PES is an effective means of ‘financing and procuring biodiversity conservation’ in the target areas. This was due to a lower than hoped for sample size of data points in terms of biodiversity/ecological related variables and the ecological situation needs further analysis with the purchase of additional satellite images/data (see section 2.10.3). The socio-

⁴⁸ 15.2 (by 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests, and increase afforestation and reforestation by x% globally) and 15.b (mobilize significantly resources from all sources and at all levels to finance sustainable forest management, and provide adequate incentives to developing countries to advance sustainable forest management, including for conservation and reforestation).

⁴⁹ 6.6 (by 2020 protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes).

⁵⁰ Interestingly, different interviewees had different interpretations of the Project’s objective, suggesting a lack of clarity on the communication of key project aims, features, results and messages by the Project. There were two main groups: those who saw the Project aim to deliver a functioning PES scheme and another who were looking to answer a research question whether the PES approach had any impact.

economic data appears to have been more complete and has undergone rather more thorough analysis, probably partly a reflection of the interests of the main investigators leading the project's research element and the lower costs of its analysis.

214. Initial results suggested that there were also few (statistically significant) socio-economic benefits e.g. fewer children reported with malaria, and it also is debatable to what extent these were a direct result of the Project or due to the influence by other government and non-government education, social or health programmes and initiatives operating in the region at the time (attempts were made to minimise the influence of other projects led by environmental NGOs operating in the area but it is not clear whether this was extended to all development initiatives).

215. It should also be noted that the Project had to make allowances for the fact that people depended on their forests for their day-to-day existence, so certain size classes of trees were allowed to be cut, along with some gathering of wood for fuel (see section 2.10.1). However, it is not clear whether this offtake of wood for fuelwood is sustainable, and some of the forest areas within the treatment group were, according to TE interviews, still being degraded by this 'lower level' of forest use and extraction. This is expected to reduce regeneration of the forests in the longer term (which would not necessarily show up on the satellite images analysed by the research team given the short time frame of the scheme) and undermines the PES scheme's value for protecting ecosystem services (and therefore attraction to potential buyers). Consequently, it is questionable whether the level of 'protection' to the forest patches arranged through the PES scheme would be sufficient to ensure their survival long-term. What was mostly being tested was whether PFOs would sign up to a specific scheme that paid them for not cutting certain sized trees, but still with some other uses allowed, and it is unclear whether the scheme, as designed, would lead to improvements in the status of globally important biodiversity long-term.

216. According to the Project Document, the Project's **purpose** was to support the GoU by providing empirical evidence regarding the effectiveness of the PES scheme(s) in order to develop a replication strategy for other areas at risk of deforestation and to attract other buyers to participate.

217. To date, no specific replication strategy has been developed by the Project or the GoU. This has been partly due to the time needed to deliver the research results (the analysis could only be done after all the field data were collected), the lack of a presentation of the Project's research findings in a form that can be used by decision-makers (the 'impact assessment report' is not suitable), and because there was no agreed framework within the Project that would enable conclusions and lessons learned to be translated into a formal replication strategy which could be used to promote the PES approach to other forested regions of Uganda. Similarly, there has been no formal strategy or framework (document) to persuade private sector buyers to engage with the model and indeed it is questionable whether NEMA is the most appropriate body (or has any comparative advantage) to design and implement this. However, the Project has influenced the inclusion of the PES model within the revised National Environmental Policy and Act (see section 2.11.1 and 2.11.2, which along with the proposed guidelines on PES, can be viewed as a 'replication strategy' for the Project's results, as they will apply to the whole country.

218. The '**goal**' of the Project was 'the enhancement of Biodiversity Conservation in Production Landscapes in Uganda and globally through better understanding of Payment for Ecosystem Services'. As worded, this suggests that better understanding of PES would 'enhance' biodiversity conservation in production landscapes. The research results of the Project do provide a contribution towards growing global knowledge (and therefore better understanding) of the effects of PES schemes (although the Project's lessons have still to be fully captured – see section 2.10.3), and the dissemination of the results will help spread wider awareness of the value and limitations of the PES approach. However, given that the analysis of the results from the research element is not conclusive, it is not clear just how much of a contribution this Project will make to 'enhancing the understanding' of policy and decision-makers on whether they should adopt the PES approach as a key tool for biodiversity conservation, sustainable forest management and rural development in production landscapes.

219. It is worth noting that while the research results are far from conclusive (not statistically significant) and do not show that the PES scheme had a clear positive impact on the biodiversity of the target area and has been cost-effective, the unanimous view of the groups in Uganda interviewed by the TE, based on their own more personal experience and anecdotal evidence gained through interacting with the local communities over the three years of the Project, was that the PES scheme had worked – both in terms of slowing deforestation and promoting forest regeneration. In other words, it did not need statistically significant data to convince some partners that the PES approach was a tool that should be promoted nationally (they were already largely convinced – evidenced by the fact that the original concept for the Project was for a PES scheme without the research element – see section X.X)⁵¹.

The overall rating for the achievement of project goals and objectives (as stated) is Moderately Satisfactory.

2.12 Sustainability

220. Sustainability is understood as the probability of continued long-term project-derived results and impacts after the project funding and assistance has ended. The TE examined sustainability of the Project from the point of view of four parameters: socio-political, financial, institutional and environmental.

221. Significant doubts about the sustainability of some of the Project's results were expressed to the TE, which had been a major concern for many for some time. Project documents only give a brief presentation on the likely factors/threats to the sustainability of project results and progress towards impact, and at the design stage the Project did not present a coherent strategy for sustainability of project results. Furthermore, unfortunately, the Project did not develop a separate sustainability and 'exit' strategy during the last year of the project, as is common for GEF projects. In addition, different partners had different ideas of who was responsible for securing sustainability, e.g. follow-up financing, although according to the ProDoc, responsibility rested with NEMA.

222. Essentially, the Project's sustainability 'strategy' has relied on: (i) 'the commitment of NEMA', the executing agency, to adopt and promote the Project's results; (ii) existence of major government policy documents that generally support PES mechanisms; (iii) the creation of a 'sense of ownership' of the Project results among participating stakeholders; and (iv) the involvement of private sector businesses which rely on, or benefit from, ecosystem services from the target area.

223. There are two aspects of Project sustainability to consider here: sustainability of the project results and sustainability of the PES scheme itself.

2.12.1 Socio-political sustainability

224. Socio-political sustainability is being supported through mainstreaming of the PES approach as a tool for biodiversity conservation into to the revised National Environmental Policy and Act and other national policy and legislative processes (see section 2.11.1). These should help encourage the private sector to step up as buyers of ecosystem services. However, as mentioned, there still needs to be a more defined framework at national level for how individual businesses can work with/link to PES schemes in Uganda. It is suggested that this is considered as one of the key issues covered by the proposed Guidelines on PES being developed by NEMA (see section 2.11.2).

225. In terms of the Project's research results, once these are published and available publically, they can be considered 'sustainable' in that they are then widely available for use and reference. At present they are largely only accessible through unpublished project reports. However, without further analysis (see

⁵¹ The CSWCT noted that promotion of PES in environmental legislation is recent in Uganda and did not exist prior to the project start, and that the project helped increase the awareness about PES coupled with learning from other experiences from within and outside Uganda, for example from work undertaken by IIED and ECOTRUST.

section X.X), it is questionable whether the research results, as presented in the ‘impact assessment report’, would be publishable in a peer-reviewed science, economics or social science journal. The short time frame of the project (2 years, rather than the original 3 years) also counts against this. Although the Principal Investigator, Project Manager and a TC member from the WCS put together a proposal to extend the biodiversity/ecological aspect of the research to four years (which would have given potentially a much better data set) this was unsuccessful.

226. Part of the reason for a weak focus on sustainability was that, in UNEP’s opinion, sustainability “was not necessary as the Project was essentially a research project where issues of sustainability are not of chief concern”. In other words, research projects aim to ask questions to test hypotheses and once evidence is available to provide answers then the project can be considered complete and what happens after the project has finished is not an issue. The TE disagrees with this. The Project was essentially comprised of two parts: a PES scheme and a research project. The scheme involved asking PFOs in the treatment group to adopt an alternative livelihood approach which had yet to be proven but which had significant costs (opportunity and costs associated with vermin) for those involved, and for the scheme itself and its participants sustainability is an important issue.

227. Initially, there was a strong expectation on the part of the local communities that the Project would be long-term, not just 2-3 years but with repeated follow-up financing and locals were led to believe that the Project was long-term. Consequently, there was some disappointment over its failure to continue. The CSWCT’s priority has been to keep the scheme going, and to keep the morale and commitment high so that PFOs don’t return to cutting down the forest and so it has continued with visits from the Community Monitors and members of the PMU. With hindsight though, it would have been better if those PFOs that chose to participate in the scheme had been clearly told that the Project was a research-orientated project that would last no more than two years, although the sign up rate would probably have been much lower.

228. Unfortunately, there was no STAP review of the project concept or PIF nor did the GEFSEC make any comments on this issue during their review, nor was the research element independently reviewed prior to approval by GEF, so the likely longer-term impacts and consequences to the community if the scheme was not sustained were not properly addressed at the design stage.

Recommendation 3. *It is recommended that all UNEP GEF projects that are orientated towards research have an assessment of the likely impact of the research element on the target audiences undertaken as part of the approval process (and the project design modified accordingly). Responsibility: UNEP PRC, with additional input from relevant external experts as required. Timeframe: Any future UNEP GEF projects that include significant research element.*

229. Up to the point of the TE field mission, the last time the communities were fully monitored was October 2014 when some 90% of the PFOs in the treatment group were still (largely) maintaining their forest according to the management plans in their contracts even though they have not been paid since late 2013/early 2014 and they knew there were no further immediate payments. TE interviews with this group in June 2015 suggested that there was still a high level of commitment and enthusiasm for the scheme, but, unsurprisingly, there was also doubt over how long they could continue without payment, and there was a general downward trend with PFOs beginning to abandon their management plans and cut their forest (although this number was still small in June 2015). Most of the PFOs involved in the Project have only small plots of forest of only a few hectares, and in an emergency e.g. need to pay for medical bills, they are very likely to cut their plots for timber to sell, or clear for growing crops. Unsurprisingly, the larger landowners interviewed commented that they could probably afford to maintain their forests for longer. This raises the question whether future PES projects should focus on the larger landowners (likely to be sustainable and cost-effective as transaction costs would be lower per hectare of forest), although then, of course, it means that the small and poorer landowners would be excluded from the opportunities offered by PES, unless they banded together e.g. as a cooperative, which would lead to further inequality.

230. Another key risk to sustainability of project results identified in the ProDoc was ‘low community compensation for forfeiting use of forest resources does not match the benefits from short-term unsustainable use’ – in other words, the economic cost-benefit equation may change which could work against continued support of the PES model. Judging from TE interviews the scheme needs to pay more to individual PFOs under contracts, as the maximum UGX70,000/ha/year payments was considered insufficient financial incentive for many PFOs to continue in future⁵². However, there was a difference of opinion between interviewees on how much that should be, with rates varying between UGX100,000 and UGX200,000/ha/year (and most of the groups interviewed at the national level felt that a rate of US\$120/ha/year was more realistic). One interviewee pointed out that he could make considerably more than the PES payment by simply renting out the forest so he would have no costs at all.

231. It also needs to be recognised that PES schemes on their own may not always be able to offer a competitive option under free market economics where short-term profit is prioritized, and additional non-financial incentives (or regulation) may be needed.

Lesson 6. Payment modalities for PES schemes need to fully consider opportunity costs such as the rental value of land for agriculture, as well as inflation costs and costs due to any increased damage from vermin resulting from maintaining forest refuges, in order to attract and retain landowners to the scheme. These need to be reviewed and revised regularly (3-6 monthly) to ensure that payments are competitive compared with other land uses. Also, identification of such costs need greater input from the locals.

232. The relatively high number still delivering on their management plans so many months after the last contract payment can be partly explained by the expectation that there will be follow-up funding. Indeed, most PFOs interviewed were anticipating funding as part of a future REDD+ scheme, which have been promoted through other initiatives by the Project partners, e.g. Murchison-Semliki Landscape REDD+ project. However, there is also a strong risk that if funding to reestablish the PES scheme is not found soon then the participants will be left feeling they have been abandoned (part of an ‘experiment’) which would likely produce a negative view of any PES schemes in the region in the future.

233. There was also a general view from the TE interviewees that the remaining forests will continue to be threatened due to continuing in-migration as migrants rely heavily on forest resources, but without being PFOs themselves are likely to engage in illegal logging and over-collection of non-timber products from privately owned areas, local tensions will only increase as more land comes under tighter monitoring and control of by PFOs if PES schemes do become established. The increased sense of ownership and ‘privatization’ of the forests (see section 2.11.1) should help resist (or at least slow) deforestation and illegal cutting from non-land owning groups and in-migrants. However, PFOs cannot guard their forests the whole time, especially the larger patches. Consequently, to be sustainable, any PES scheme in the target area needs to introduce sources of finance/livelihoods for local people who do not own forested land, particularly for in-migrants, such as improved access to alternative fuelwood (woodlots of *Eucalyptus* and *Cassia*) and energy efficient wood burning stoves, as well as for timber (although Mahogany takes 40 years to grow to sufficient size) and for poles. Some non-Project initiatives are starting to address this issue, e.g. through another CSWCT-managed, Darwin Initiative funded project.

234. Also, the lack of an agreed land-use plan covering the region, which integrates current activities and proposed developments for the agriculture, forestry, urban, oil, environment and transport sectors, is a barrier to sustainable land management and again could undermine the results of the PES scheme, and there is a clear need for better integrated land use planning at the District and national levels covering the target areas.

The rating for socio-political sustainability is Moderately Likely

⁵² Also the current level of payment of \$35/ha/year is not realistic or sustainable in the current voluntary carbon market.

2.12.2 Sustainability of Financial Resources

235. The single biggest issue relating to sustainability of project results resolves around financial sustainability of the PES scheme itself. This is a common issue for PES projects especially when donor grants fund the initial pilot phase.

236. In the current project's case, it was not clear from project design documents what would happen once GEF funding finished – where continued payments to PFOs undertaking forest conservation activities would come from, although the expectation was that private sector buyers would have negotiated long-term contracts with the PFOs to maintain their forests under sustainable management schemes by the end of the Project. However, even at the MTR stage there were concerns over the lack of private sector buy-in and whether the scheme could be sustained beyond the pilot period and it was recognized that there was a danger that any conservation gains could be lost. This was debated by the TC who undertook to come up with some solutions (proposed at December 2013 meeting) but unfortunately it proved impossible to secure sustainable financing during the lifetime of GEF funding.

REDD and other donor sources

237. It had been envisaged that REDD+ would be the primary source of funding for the Project (depending on the international market for carbon) and the PES scheme was included in a landscape level REDD+ programme for the Northern Albertine Rift that offered a potential long term source of finance through an anticipated national REDD+ programme. However, international climate negotiations and the establishment of an international REDD+ mechanism have proceeded much more slowly than expected and it is uncertain when funds for REDD carbon credits will start. At the national level there is still only a draft REDD Strategy and consultation process that is examining how REDD+ should best operate in Uganda with an envisaged action plan that may include PES⁵³. This means that it is likely to be some time before the landscape level programme receives REDD carbon funds (assuming it is successful in its application for funding) and there is no immediate funding under the national level REDD activities for follow-up funding for the GEF project. As a result, the Project partners are not relying on the Government for REDD+ funding, but instead have been rightly looking to connect with the voluntary carbon market⁵⁴.

238. The Project has also sought funding to promote alternative livelihood models, and has had some success from donors in funding these, notably for beekeeping (forested areas need to be maintained as the bees rely on water and flowers) under a UK Darwin Initiative grant. Initial activities have taken place with farmers who are PFOs in the scheme with provision of beehives and training for sale of honey and wax. However, these are also short-term grants and an alternative approach to secure long-term funding that puts much more effort into securing private sector buyers for multiple ecosystem services (water provision and regulation, ecotourism, soil formation (and another angle to 'sell' the PES approach could be through food security)), is probably a more sustainable and cost-effective solution. The CSWCT has sought to develop a series of follow-up proposals to cover the control villages and expand the project scheme including applications to Australia Aid but without success.

⁵³ The TE understands that part of the goal of REDD+ in Uganda will be to recover vegetation through passive (leave areas to regenerate) as well as active reforestation (e.g. enrichment planting, planting with fast-growing species) - there won't be focus on just high carbon areas, so the results of this Project would clearly be relevant. Also, given that almost 70% of the forest estate is private and private owners cannot be forced to protect their forests, offering incentives e.g. through a PES approach, are likely to feature prominently. Two pilot projects (Mt.Elgon and Kachorwa) have been proposed to examine how implementation of the Action Plan would develop, but neither of these include the GEF project. There are interim guidelines for supporting development of REDD projects but these are not yet publically available. The TE understands that future projects will be required to show how they will contribute to national REDD goals and it is envisaged that a register of REDD+ type projects will be compiled in 2015.

⁵⁴ One reviewer commented that 'Financial sustainability was thought about by CSWCT and IIED but the carbon market and getting the scheme into the National REDD programme and forming part of the NARCG Murchison-Semliki Landscape REDD+ project seemed like the best options for financial sustainability at the time. This however, put a brake on any efforts to pursue certification and sale of carbon credits through Plan Vivo as this was considered incompatible. Note that financial sustainability was also a consideration in the determination of the payment level or rather the decision not to raise it after the initial consultations. While the focus was on carbon, this was not necessarily ignoring the other ecosystem services associated with forests. The intention was that it would be *carbon plus* other benefits both in terms of ecosystem services and livelihoods. This was the approach taken in the concept note prepared for Barclays Bank via the Cambridge Programme for Sustainability Leadership.'

Private sector financing

239. As the ProDoc notes ‘if the results of this project are to be replicated and sustained, business and the private sector in Uganda and internationally will have to buy into this model so that they participate as “buyers” of the ecosystem services’, with the chief initial sources of follow-up financing coming from carbon offset and water supply/quality markets, and one ‘high risk’ to sustainability identified at the design stage was that there may be ‘lack of interest by potential buyers of ecosystem services’.

240. Thus the PES scheme was to be promoted to potential national and international buyers of the ecosystem services the forests provide. Some interest had been raised among potential private sector buyers (see section 2.11.1), but financial commitment was not secured despite several attempts made through submission of requested concept notes. National buyers who were approached included Hydromax Ltd (hydro-electric generating company dependent on reliable water supply from the target area), Tullow Oil Pty (potential interest in biodiversity offsets), and Matooke Tours (ecotourism), while the international buyers included Barclays Bank (interest in carbon offsetting) and Blank Park Zoo from Iowa, USA (interest in biodiversity conservation, although they provided funding in the form of a one-off grant). Approaches were also made to sugar, tea, and tobacco companies. IIED had responsibility to help connect with International buyers, but their joint efforts with CSWCT were not very successful. TE Interviewees with oil companies operating in the Northern Albertine Rift region, revealed that any Corporate Social Responsibility support needed to be clearly business relevant and this was felt to be lacking. At present the two main oil companies involved in exploration of the Northern Albertine Rift are looking at the ecosystem services across the landscape and the potential impact of their operations on these, but until operating/extraction licences are issued to the oil companies they are unlikely to commit any funding. Furthermore, they are likely to agree a collective mitigation scheme tied to the ESIA and the results of ecosystem services study due in October/November 2015, which may or may not support future PES schemes in the area anyway.

241. There has been some initial interest in developing private sector-led ecotourism ventures centered around chimpanzee tracking⁵⁵ or bird watching (Uganda has some of the highest diversity of avifauna in the world), but again nothing concrete has developed to date.

242. Most of these efforts have been for short-term, largely one-off grants and not sustainable in the longer-term. For that, the PES scheme needs a different funding model with a focus on getting the buyers of the schemes to commit as part of their business model (including environmental protection should be part of their business case). This has not happened to date, and it needs other relevant players who are more experienced and more likely to have influence with the private sector, such as the Uganda Investment Authority, to become involved and the Project partners need to seek specialist advice on how best to engage the private sector. The Project should also give more emphasis to examining and gaining certification under the various ‘wildlife friendly’ and other certification schemes, such as from the Plan Vivo Foundation⁵⁶ which would allow it to access international voluntary carbon markets more readily (it has applied once unsuccessfully). The PES scheme has a strong appeal especially because of the focus on chimpanzees and a lot of background information now exists after the Project.

Recommendation 4. *It is recommended that the CSWCT and NEMA seek certification of the PES scheme under the Plan Vivo scheme, which would substantially improve the chances of accessing the*

⁵⁵ Also, ‘chimpanzee tourism’ needs to be carefully managed to ensure no risk to the chimpanzees from disturbance or human to chimpanzee disease transmission.

⁵⁶ Plan Vivo sells carbon emission reductions with emphasis on small forest owners so the PFOs involved in the Project are good candidates. It offers a framework for supporting communities to manage their natural resources more sustainably, with a view to generating climate, livelihood and ecosystem benefits. Eligible activities (for generating Plan Vivo Certificates) are afforestation and agroforestry, forest conservation, restoration and avoided deforestation. Communities decide which land use activities (e.g. woodlots, agroforestry, forest conservation) will best address threats to local ecosystems and are of interest and value to them. See <http://www.planvivo.org/>

voluntary carbon markets. It is also recommended that if the CSWCT and NEMA partner with other groups with more experience of PES schemes, such as Ecotrust (which advises government of Uganda on PES) to put in a joint application to Plan Vivo with Ecotrust taking the lead on the carbon component. Responsibility: CSWCT, Ecotrust, NEMA, PlanVivo Foundation. Timeframe: By end of March 2016.

243. The initial and, to date, only ‘buyer’ of the ecosystem services provided by the target forests was GEF for the ‘globally important biodiversity conservation services’ (protection of forest areas important threatened biodiversity, notably chimpanzees), although this again was in the form of a grant rather than sustainable financing (GEF financing is intended to be catalytic and not regular payments).

244. The lack of private sector financing also raises an ethical issue. Some private sector businesses are directly benefiting financially from the forest ecosystem services, e.g. regular water supply, but do not see the need to make direct payments to maintain them even though they are aware of the high opportunity costs born by the PFOs⁵⁷. In effect the PFOs are subsidizing the users of these forest ecosystem services. It was clear from TE interviews that the private sector needs to have more encouragement and incentives (and possibly regulation) before it fully engages with, and becomes a source of sustainable financing for, the PES model. However, the private sector also needs to be sure that any funds going to service providers are being used to maintain the ecosystem service the buyers are purchasing. Unfortunately, as mentioned, there has been no clear engagement or payment framework for private sector buyers to join the scheme, and it was never clear how payments by the private sector would be made to the local communities for maintaining the forest (one option may be through regular payments into a revolving fund). There was also little identification of specific business groups or frameworks that should be targeted for promoting project results, the methods to use, opportunities, contacts, etc. Instead the approach has been rather *ad hoc*, largely because the project was focused on its research elements. As one interviewee stated “thinking has been ‘project wise’ whereas participants need to think ‘market wise’”.

245. The Project would have benefited from having a dedicated member of the team focused on developing a framework for negotiation with the private businesses. Interestingly, a new WWF project being developed in Uganda project has taken this lesson on board and appointed a specific member of staff who is tasked with dealing with partnerships, fundraising and engagement with the private sector⁵⁸.

Government commitment

246. Several interviewees commented that the GoU needed to (be seen to) take a stronger lead on the PES approach (“the private sector will only follow if the Government first shows commitment”). The fact that the Government (NEMA) did not provide the pledged cash co-financing for the Project apparently sent the message that it was not so interested in this Project or the PES model; in other words, it was not a priority for the GoU and the private sector used this as an excuse not contribute either. Instead, the Project was seen as a collaboration between NGOs and (largely international) academia, and a rather ‘esoteric’ research project, and the business/economic case was not presented clearly enough. From the private sector’s point of view, the involvement of civil society was not considered as important as tangible government commitment would have been.

⁵⁷ For instance, Hydromax has a 9MW hydroelectric dam on the lower reaches of one of the rivers that passes through the project area and has plans to expand to further sites along the Rift escarpment. Although the company understands that it needs to protect the forest as they help guarantee a reliable supply of water (it’s crucial for their business model) and funded an initiative to sensitize local farmers to good farming practices (soil conservation) along river banks of those watercourses feeding into their generator with donation of fruit trees to locals. However, it has not given any money directly to Project or scheme, despite co-financing letter offering US\$80,000.

⁵⁸ One reviewer commented that ‘It is important not to under-estimate the challenges in getting the private sector to pay for ecosystem services and to demonstrate a business case. It is not just the challenge and cost of gathering the data but also the public good/lack of incentive issue. The majority of PES schemes particularly for watershed services are funded by the public sector (See Forest Trends report on State of Watershed Investments 2014). The private sector often gets involved when there is a regulatory change.’

247. It could also be argued that the GoU needs to be seen as a ‘buyer’ of the ecosystem services provided by the forests in the target area as they provide an important corridor for the biodiversity between the PAs, which are state owned and run, and unless these corridors are maintained the biodiversity and ecosystem services provided by the PAs will eventually decline. In other words, the Government needs to buy the ‘biodiversity conservation service’ provided by the target forests.

248. Interviewees also expressed the view that specific policy, regulations and other incentives needed to be developed to promote uptake of the PES model by the private sector in Uganda,⁵⁹ including tax incentives to businesses that support conservation efforts, as private companies will always be to try to maximise profit first. The inclusion of PES in the revised National Environmental Policy and Act, and development of the proposed guidelines on PES should support this (although the latter are voluntary), but it will still be necessary for PES schemes to work with individual companies and businesses to engage them fully. NEMA also needs to exert greater influence over/pressure on potential buyers of ecosystem services, with greater direct communication with the private sector on PES. Establishing an official PES-private sector business forum or focus group/round table that would bring sellers and buyers together and facilitate such discussions/interactions might be valuable.

The rating for the financial sustainability is Moderately Unlikely (without additional financing identified and secured).

2.12.3 Sustainability of Institutional Frameworks

249. Apart from the collaborative agreements between partners (see section X.X), the major structure that helped deliver the Project was the system of Community Monitors. These had been established under a previous project but their role and number was expanded for the Project and they have been one of the critical factors responsible for the good delivery of the PES scheme, offering essential and much appreciated advice on (among other things) the execution of management plans to PFOs. The Community Monitors were highly respected by the individuals from the local communities interviewed by the TE, and without the commitment of Community Monitors it is debatable whether the scheme and the research project could have been delivered at all.

250. However, funding for the Community Monitors has ceased (the last payments were made in March and April 2015), although most are continuing to act in this role on a part-time, voluntary basis in the expectation, like the PFOs, that there will be further funding in the near future. Although most have small plots of land from which they can grow food, in the longer term the Community Monitors cannot continue without some form of payment. The CSWCT has sought to retain the Community Monitors through incorporating them into its own infrastructure and new Strategic Plan, which supports institutional sustainability, it still needs to find additional funding for the individuals themselves. How long they will be able to continue without payment is uncertain (at the time of the TE only one Monitor had left), but judging from TE interviews probably not more than another few months. Rebuilding the framework of Community Monitors would take considerable time and extra investment as it takes considerable effort to build the special kind of relationships between the community monitors and the local communities that have been so important to delivery of the PES scheme.

251. If possible NEMA and CSWCT should try to find some emergency follow-up funding to cover payments to retain the Community Monitors for at least the next six months (NEMA has some specific funds for biodiversity conservation, which may be available) to ensure they do not disband and to tie them

⁵⁹ Interestingly, one private sector interviewee stated that until the Government develops regulations to ensure that industry pays to maintain the forests in key watersheds – in other words until the rules apply to everyone and not just those targeted by a project – then there would not be a widespread adoption of the PES model

over until longer-term sources can be found. Given that the Community Monitors also (unofficially) provide important support to the DFO in his office's work this would also benefit the local District authorities⁶⁰.

Recommendation 5. *It is recommended that some emergency funds are found for at least the next six months to ensure that the system of Community Monitors does not disband. Community monitors need to be paid a retainer fee whilst new funding is procured (if the PES scheme is to be re-established). Responsibility: CSWCT, NEMA. Timeframe: Within three months of closure of the Project.*

252. As well as incorporating the Community Monitoring structure, the second strategic plan of the CSWCT covering the period of 2013-2017 integrates many of the GEF project activities, which, if funded would help promote greater institutional sustainability of the PES scheme. The CSWCT has also signed various partnership MoUs to support this. In 2013 and 2014 with the Uganda Wildlife Authority, National Forestry Authority, Hoima District Local Government, Kibaale District Local Government, St. Josephs Vocational Training Centre Munteme, and Bunyoro Kitara Kingdom to integrate Project activities into the existing structures of these institutions.

The rating for the institutional sustainability is Moderately Likely.

2.12.4 Environmental sustainability

253. The ProDoc does not identify any specific environmental factors that could affect sustainability of project results, but, if successful, the Project is likely to improve the state of the environment, e.g. through maintenance and recovery of ecosystem services, and positive socio-economic impacts locally through providing an alternative livelihood approach through the PES scheme. Also, it was expected that if the results showed strong positive biodiversity and ecological benefits the PES approach would be widely adopted (including globally) leading to improvement of environmental conditions elsewhere. However, it is unclear what impact the weak positive gains shown by the scheme (see section X.X) will have on other conservation initiatives outside of Uganda (at present probably minimal).

254. Climate change was not considered as an important element in this project. However, by promoting protection of the remaining forests in the target area, particularly through highlighting the opportunities through carbon markets, the Project contributes to the mitigation of Green House Gases (GHG) and the threat from climate change impacts.

The rating for the environmental sustainability element is Moderately Likely.

2.12.5 Catalytic Role and Replication

Catalysis

255. There has been some good evidence of catalysis⁶¹ of Project results and ideas to date, and there has been some evidence of catalytic financing.

256. The Project's results and experiences have helped catalyse uptake and promotion of PES approach at a variety of levels. Examples of catalysis include:

⁶⁰ One reviewer stated that "WCS is, with our Darwin grant, building upon the (UNEP-GEF) PES project and employing the community based monitors. Furthermore, we are providing the PFOs with rural financial services and improved agricultural practices and linking them with markets. In other words sustainability is ensured." However, it is not clear whether this involves all the community based monitors and PFOs that have been involved with the project.

⁶¹ Catalysis can be said to occur in cases where project activities have stimulated others to undertake complementary activities in line with the project's aims and results. This includes behavioural, institutional or policy changes, incentives, catalytic financing, or champions to catalyse change.

- Project results, experiences and lessons learned feeding into the development of thinking on PES within the revised National Environmental Act and Policy (and hopefully the proposed PES guidelines);
- The adoption of the application process for recruitment of forest owners by UNDP/WWF project “Conservation of Biodiversity in the Albertine Rift forests of Uganda” in 2011/2012;
- How to establish and operate a PES scheme which have fed into the proposed NARCG REDD+ project in the Murchison Semliki Landscape⁶²;
- The Ecosystem Based Adaptation project implemented by IUCN in the Mount Elgon region which adapted the payment modalities executed by the Project;
- In 2012, three PFO associations in Kibaale and Kyenjojo Districts requested similar approaches initiated by the scheme, including forest assessment and mapping; and
- The design of the PES model for an EU-funded WWF project⁶³ on sustainable financing for the Rwenzori National Park, in 2012/2013.

257. The Project has also contributed knowledge and guidance to the Poverty and Conservation Learning Group (PCLG) in Uganda, and the PMU was included as a member of the National REDD+ Working group and contributed to the draft sub-national REDD+ guidelines.

258. Other projects have been keen to build on the perceived success of the Project, particularly the relationships built with local communities. For instance, a WCS initiative is working with some of the PFOs that took part in the GEF project to train them in conservation farming (e.g. mulching, zero-tillage and other techniques to increase yields) as well as supporting microfinance at the village level (‘village banks’), growing bamboo as a source of charcoal, and other alternative sources of income such as beekeeping.

259. Some of the partner organizations have well-established networks and links to other natural resources management and rural development initiatives, programmes and policy setting frameworks, and have used these to promote the project results, e.g. IPA and NAHI. Among the Project’s international partners, the IIED has a long interest in the environment-sustainable development nexus and has long championed innovative approaches such as PES, and promoted the Project results including hosting presentations by the Project Manager at international meetings. However, although many of the partners have hosted articles and information on the Project on their own websites, there has been no coordinated plan to publicise the Project results to catalyse change (to some extent Project partners have been waiting for the final results of the analysis of the research data to be made available).

260. UNEP itself was to ensure that the results of the Project were disseminated widely within the organization, but particularly within its portfolio of PES projects and the EMSP and link with UNEP’s REDD team. However, the TE discovered little awareness of the Project among staff at UNEP’s headquarters in Nairobi and there has been little (if any) direct contact with other UNEP projects that would have benefited from sharing of results and lessons learned (see section 2.10.3 and 2.11.1).

261. Whilst there has been no specific focus on supporting particular individuals to promote the PES approach by the Project, some individuals within partner organizations have acted as its ‘champions’ (see section 2.11.1). For instance, the NEMA Project Coordinator has actively sought to raise awareness of the Project within the Agency, at a high political level and at wider events he has attended whenever the opportunity arises (including international meetings as he is CBD Focal Point for Uganda). Individual PFOs interviewed by the TE had also clearly been acting as champions for the PES scheme, and indeed its success

⁶² This region is conservation priority landscape situated east of Lake Albert in western Uganda, which includes parts of the Hoima and Kibaale Districts. See https://en.wikipedia.org/wiki/Murchison_Semliki_Landscape.

⁶³ The WWF project integrated PES policy development as one of key outputs and has appointed Chimpanzee Trust and NEMA to be part of its steering committee.

has triggered further interest on the part of the PFOs to explore alternative livelihood approaches for their land rather than traditional cash crops, e.g. beekeeping along the forest margins.

262. The Project was intended as a first step to catalyse private sector buyers to become involved (invest) in PES schemes. However, as mentioned there has been much less private sector engagement than hoped for, and no catalytic financing from them. NEMA rather than the Project *per se* was tasked with solving the issue of locating Ugandan private sector buyers for scaling up the pilot into a larger PES scheme and replicating it to other areas, but this has not yet occurred (see section 2.12.2).

Replication⁶⁴

263. It was expected that the model would be replicated more widely if the Project produced clear and strong evidence for PES as a cost-effective approach for biodiversity conservation in privately owned forest patches in Uganda. In addition, the methodology of testing for the results (control versus treatment, allowing an experimental approach) was also expected to be replicated in other types of PES work where slightly different designs are employed, or could be replicated by GEF to test other non-PES systems in its projects⁶⁵.

264. There has been little direct replication to date. Although described in the ProDoc, replication was only briefly considered at the design stage. Instead, a specific replication strategy was to be developed by NEMA once all the Project's results were delivered. Such a strategy has not been developed, although NEMA has begun integrating the PES approach into its work as a direct result of its involvement in the Project (see section X.X) and promoted PES in national policy development which can be considered a 'replication strategy' of sorts.

265. Although payments provided an incentive to join and remain with the scheme, it should be recognised that the Project worked with 'pioneers' who were willing to try something new (so not typical farmers) and those who could afford to take some risk, probably because they were richer and had larger areas of land. Consequently, this group may not have been fully representative of the PFO community and whether the same outlook exists in other areas of Uganda so allow replication of the scheme is unknown.

The project's catalytic role and replication is rated as Satisfactory.

2.13 Efficiency

2.13.1 Cost efficiencies

266. No specific cost- or time-saving measures were identified at the project design stage. However, as mentioned previously, the Project addresses two main aims at once, namely, to deliver a PES scheme for the benefit of land owners/users and the environment, and, to provide information on whether PES schemes are effective (or not) through its experimental design. The ProDoc points out that this dual role was expected to enhance the cost effectiveness of the GEF investment, although this was also a source of tension between partners (see section 2.14.3), which may have reduced efficiency.

267. The Project built on multiple lessons from several previous and active initiatives focused on PES/sustainable development/rural development/poverty alleviation issues in the target region and more generally in Uganda (detailed in project document). These included a United Nations Development

⁶⁴ Replication is often defined as lessons, experiences, demonstrations, techniques, or approaches coming out of a project that are repeated or scaled up in the design and implementation of other projects.

⁶⁵ However, this seems to be simply stating that a design with randomized treatment and control groups could be employed to test effectiveness of a project's approach, which is standard practice in science.

Programme (UNDP)-GEF project in the Albertine Rift region (which involved WCS and WWF) that had been assessing potential sustainable financing mechanisms including REDD to support protection of the northern corridor, which laid the foundation for many project approaches, e.g. establishing general awareness of forest values, and the Project sought to reinforce.

268. Also, the Project built on, and was to be executed by, a collaboration between several partners all of which brought specific expertise/knowledge/skill sets to the Project and were able to build on institutional relationships and local structures already in place. For instance, CSWCT had offices in Hoima District and long experience of chimpanzee-human conflicts, and it has long history of working with the local communities in the target area (so local knowledge and relationships). The system of Community Monitors was initially established through a previous project funded by UNDP and WWF in the Albertine Rift, with which the CSWCT had been involved, which was then co-opted by the Project. Similarly, the Ecotrust was very experienced in PES schemes in Uganda, and IIED contributed its experience of PES schemes from other parts of the world. All of these contributed to project efficiency.

269. The activities of other groups not directly involved in the project also contributed, strengthening its technical design and implementation and promoting efficiency. For instance, JGI had a pilot REDD project which included arranging land titles to better secure land ownership between 2010–2013, the experiences of which fed into the discussions on identifying land rights during the contracting process, and JGI helped establish the PFO associations in the region, and the Ministry of Water and Environment had previously implemented a project to improve forest-based livelihoods around PAs, focused on community watershed management, including tree planting, in several Districts including the Hoima (not Kibaale).

270. CSWCT also organised a meeting with participants and stakeholders to explore further possible linkages. As a result, some changes were made in the local partnerships and to avoid duplication with the GEF project and increase efficiency. Most notably, the WCS was brought into the Project to conduct a comprehensive survey of mammals and birds in the project area (although it is not clear whether this information was used). The Project was also fortunate to have substantial baseline information available on some areas of the target Districts through previous or on-going research projects and government programmes.

271. All the above helped to keep Project start-up and running costs low, and presented additional opportunities to raise awareness and promote the mainstreaming of the Project results more widely. Other, practical measures to promote efficiency included: employment of standard procurement practice to contracting (minimum of three bids) by NEMA and CSWCT, and CSWCT established a tree nursery at Hoima as it was cheaper than contracting out the supply of seedlings.

2.13.2 Timeliness

272. There were delays during the first year of the Project largely due to national elections in February 2011 and a lengthy process to appoint the Project Manager, and then the need (following agreement at the first PSC/inception meeting) to increase the sample sizes of both treatment and control groups which necessitated additional planning and time to incorporate the extra project management and administration demands. However, after the first six months of implementation the Project picked up pace.

The overall rating for efficiency is Satisfactory.

2.14 Factors affecting performance

2.14.1 Preparation and readiness

Logframe, indicators and targets

273. The Project was developed before the concept of Theory of Change was introduced for UNEP projects. In its place is a traditional logframe (standard throughout the GEF family of agencies and portfolio).

274. Although the logframe is given as an Appendix to the ProDoc, the narrative on the intervention logic and causal pathways from project outputs towards impact is not well described in the main project documents, largely because of the Project's research focus aimed at answering a research question rather than a development project that seeks to achieve environmental and/or social impact and change.

275. The logframe is overly complex and confused, with a focus on activities and outputs (given in detail which is not necessary for a logframe and just confuses the picture) rather than on the outcome/objective level, some outcomes that are set more at the output level (again a reflection that the Project was largely seen as a research project), and with outputs often set at a different level in the causal logic than their associated outcomes. For instance, *'Outcome 1 – Evidence of effectiveness of payment scheme(s) to a) reduce deforestation and biodiversity loss and b) cover local costs associated with maintaining biodiversity'* is essentially an output (and very similar wording to the Project objective) as is Outcome 3 – *'Project lessons in using PES to deliver multiple benefits including global benefits communicated nationally and internationally for wider replication'*.

276. In addition, many indicators in the logframe are not fully SMART⁶⁶, and simple process rather than change indicators (e.g. delivery of training workshops), and do not relate directly to their associated outcome⁶⁷. For example, the indicator for Outcome 1 – *'Recognition of PES scheme in Uganda by other stakeholders'* – is rather vague and not a direct measure of the outcome *'evidence of effectiveness of payment scheme(s) to reduce deforestation and biodiversity loss and b) cover local costs associated with maintaining biodiversity'*, and its associated targets – *'by end of 4th year-the scheme will be completed, ecosystem gains quantified and mechanism on how to replicate the project in other areas'* - do not help to define it better in practical terms.

277. Component 2, which is concerned with training, could have included an indicator concerning how well training is put into practice, such as the number of trained people applying the training they received through the Project during their work activities, with, for instance, the number of references to PES in annual work plans of the District Environment and Natural Resources (ENR) Departments, the incidence of PES in Corporate Social Responsibility (CSR) schemes of private sector companies, etc. An indicator along these lines was suggested by the MTR but not adopted.

278. Also, some targets are not relevant to the indicator, e.g. *'Results being widely discussed with stakeholders and informing policy makers in Uganda and at the GEF'* is not directly related to the indicator for the Project's objective - *'Statistical analysis of relevant parameters show that the results are conclusive on whether experimental landowners performed better than control group'* (rather this end-of-project target is more relevant to Outcome 3).

279. Baseline information is also often vague and qualitative in many cases. For instance, there was no baseline measurement of the level of 'understanding' for the Outcome 2 indicator, only a very vague qualitative statement – *'there is limited knowledge and training on PES schemes in Uganda'*. Generally, Outcome 2, as worded, deals with information and awareness, but most of the activities associated with this outcome go further and deal with wider capacity building through targeted training.

⁶⁶ Specific, Measurable, Attainable, Relevant and Time-bound

⁶⁷ Indicators are given for outputs in the logframe, although strictly speaking these are not required in a logframe as an output is a deliverable and therefore the indicator of its achievement is its delivery. Activities also do not require indicators.

280. Means of verification are presented in the logframe, although the identification of assumptions in the logframe is cursory and does not fully mirror the list of assumptions/risks in the main text.

281. Assuming no major delays, the original 3-4-year timeframe was realistic in terms of detecting changes in the social and economic/financial measures, but was probably too ambitious (unrealistic) in terms of its biodiversity aims especially in relation to detecting significant changes in reforestation and regeneration, and (more so) changes in the population of Chimpanzees inhabiting the forests in the target area. The fact that a 6-month extension was needed to deliver the Project (and there were further short delays) and (unsuccessful) applications for funding were made to allow four years of field data collection, is evidence that the original timeframe was too ambitious.

Strengths and weaknesses in project design

282. Considerable effort was put into both the design of the PES scheme and the research element of the Project, which had a number of strengths, including the involvement of some of the world's experts on PES (see section 2.4), and a team of highly respected international researchers.

283. Project preparation (PPG phase) was generally well organized. The design of the data collection was considered robust with a well-designed econometrics data collection scheme. There was clear separation of responsibility for the collection of survey data for the impact assessment and compliance monitoring, and the choice of biodiversity, carbon and water as the initial ecosystem services to address through the Project was appropriate as it was assumed (at that time) that it would be easy to find potential buyers for them.

284. However, there were a number of significant weaknesses in the Project's design. In terms of the research element, one of these was the close distance between treatment and control villages. The randomised design required the separation of treatment and control villages to be at least 5 km apart to avoid contamination. However, there was some evidence that this did not hold and opportunities for 'contamination' occurred. There seems to have been exchange of information between the treatment and control groups, and the 'control' didn't really work. For instance, members of some PFO associations (including PFOs from both treatment and control villages) had discussed the Project and possible follow-ups and other initiatives, e.g. REDD+, among themselves, and it is clear that many members in control villages were well aware of the Project payments and undoubtedly influenced by them. With hindsight the control villages should have been located much further away from the treatment villages, although it is probably not possible to have a pure control in this situation due to the movement of people between villages and the easy opportunities for communication and knowledge sharing, e.g. through mobile phones, social media.

285. In terms of the PES scheme, there was a complex calculation for determining the payment level to offset opportunity costs, which was based on the estimated costs to the landowners and their willingness to accept, the amount that buyers were thought to be willing to pay, and the resources that were available to cover the payments. In the end, it was acknowledged that the payment level of UGX70,000 was a "calculated guess" and "not the most scientific process" (as one interviewee put it), and was less than many of the recipient PFOs were hoping for or considered realistic to offset their costs. It seems likely that the response and sign-up to the scheme would have been higher (and consequently produced more data giving more certainty on the statistical findings) if the Project had been able to offer a higher level of payments. However, like other aspects of the Project, the total amount available to pay PFOs was limited by the GEF budget which was the only source of financing for these payments (co-financing was used for other purposes).

286. In addition, although patches of forest to be targeted by the Project were initially identified on the basis of risk of deforestation, potential for watershed services, and importance as sites along the chimpanzee corridor linking the local forest reserves, the selection of treatment and control villages to ensure they were at least 5km apart (dictated by the researchers not the PMU) meant that not all the

important patches of forest for connectivity were included within the Project area and conversely some villages were included that were not located in important parts of the chimpanzee corridor. Consequently, the forest blocks covered by the PFOs do not form a complete corridor between forest reserves. This reduced the likelihood of achieving protection and improving the status of the globally important biodiversity that the GEF grant was seeking to address (for project objectives see section 2.2.1).

287. Overall, it was very ambitious for its budget, especially after the sample size was increased, and some elements were not well thought through at the design stage in terms of how they would work on the ground, such as the payment arrangements and monitoring schemes, but had to be developed later during implementation.

Review of Project

288. Disappointingly, there was no independent technical review of the research element of the Project at the design stage. One member of the STAP had apparently given some initial advice on the original project concept and more generally STAP had been encouraging GEF projects to adopt a more experimental approach at that time, but since this was an MSP there was no formal requirement for a STAP review. Although the project was assessed by UNEP's PRC none of the members of the Committee had the technical, particularly research background, to assess the research design and there was also no external review of the technical element (as would have been expected if the project had been submitted to a research body for funding). However, some elements of the Project were reviewed by 3ie through an application made to them for funding, but only after the GEF project had been approved.

289. The TE understands that there was an initial error in the power calculation used to determine the sample size at the design stage, which may have been picked up if there had been an independent review (it was not identified until after implementation had begun). It is possible that if the research element of the Project had been thoroughly reviewed at the PPG stage this and several other weaknesses would have been identified and GEFSEC and UNEP would have recommended a much higher co-financing: GEF ratio be achieved before the Project was approved by the GEF CEO. Indeed, it is standard practice for applications made to major funding bodies for scientific research to be assessed by a panel of independent experts as part of the review process. This did not happen with this project. Instead, there seems to have been an assumption among the other project partners, including UNEP, that the researchers involved 'knew what they were doing' and because the research component was rather technical (and not adequately communicated to non-technical individuals involved in the Project at the PPG stage) no one seriously questioned its initial design and therefore associated budget. In the TE's opinion, all GEF projects should undergo a rigorous assessment at the design stage, even if they are not a Full Sized Project, and the initial review by the UNEP PRC needs to ensure that if it doesn't have the relevant expertise in-house it should seek outside expert input.

290. There was also the view that because this was considered a very innovative project for GEF (and therefore 'riskier than most') the project proponents should only apply for a GEF Medium Sized Project, which in 2008/2009 were eligible for up to just US\$1,000,000, as this would be easier to get approval⁶⁸. Thus the GEF budget was more or less fixed/known from an early stage but it did not match the needs or ambitions of the project design.

291. Overall, the Project was let down by a weak logframe and project design which is a reflection of the attempt to unite a development project with a research project.

Overall, the project preparation and readiness was Moderately Satisfactory

⁶⁸ There was also a trend to promote a larger number of smaller GEF projects rather than fewer larger projects at the time.

2.14.2 Project implementation and management

Project management arrangements and MoUs

292. Project execution arrangements, roles and responsibilities were clearly identified in the ProDoc with separate partners responsible for project management, impact monitoring, payments to PFOs, and compliance monitoring. NEMA had overall responsibility for execution in Uganda with CSWCT undertaking a largely day-to-day project management and coordination role under an MoU with NEMA implemented through a Project Management Unit, and responsibilities of other key partners - IPA, Katoomba Group and possibly IIED (as a co-executing agency) - also governed through MoUs with NEMA that were signed early in the Project. CSWCT's other tasks included organizing payments for the PES scheme and management of the contract with IPA.

293. IIED was to be a co-executing agency along with NEMA but following the revision of the budget after the inception workshop, it was clear that there would be little funding available from the GEF budget for IIED's participation. Also, IIED considered it important that the executing agency should be based in the country where the project was taking place and IIED's main offices are in London. Consequently, IIED decided to focus on implementation of its Darwin Initiative funded projects with the CSWCT which were financing various parallel activities in the forests in the Hoima area and treated as co-financing for the GEF project. However, IIED did provide expert guidance on the design of the PES scheme (e.g. contract design, monitoring and compliance arrangements for the contracts, framework for consultations with the PFOs, including initial consultation guidelines) as well as sourcing for co-financing from the Darwin Initiative. IIED used its expertise to help build capacity of Uganda partners, CSWCT and NAHI in aspects of PES scheme design. IIED also provided an international platform on which the PMU could showcase the Project.

294. The international research team and IPA led on the implementation of the randomised evaluation methodology, leveraged additional resources from the International Initiative for Impact Evaluation (3ie) for evaluation activities, and the international researcher team provided support in the design of databases for data storage and retrieval to Ugandan partners. The international researchers were essentially treated as part of the IPA 'team'. Data collection was undertaken by IPA using individuals who were knowledgeable and/or lived in the Project's target area or Western Uganda. IPA collected socio-economic data (demographics, household data, land use, etc), and importantly had not been previously involved with the CSWCT so was seen as independent/neutral. IPA had a MoU with NEMA, but delivery of its work was managed by the CSWCT. Although there was a Uganda team leader at IPA, decisions on project design and implementation were largely guided by the international researchers who had no formal written contract with NEMA and data collected by IPA was handed over to the PIs⁶⁹.

295. The other main partner, NAHI⁷⁰, provided guidance on the development of land management interventions for the scheme and also undertook much of the forest baseline surveys during the PPG, which were expanded after implementation began, and contributed its knowledge on methods for monitoring of ecosystem services and experience on collaborative partnerships with private sector in the tobacco value chain.

⁶⁹ The TE heard concerns about the dominance of the international researchers in the decision-making process within the Project yet they did not appear to have any formal agreed decision-making power. The TE consultant understands that the group of international scientists had an agreement with IPA who were responsible for managing their work. NEMA had a written agreement with IPA and it was understood that IPA would manage the international researchers. It is unclear whether there were any formal written agreements between IPA and the international researchers, and if these existed who were these with and what the requirements/conditions were. Unfortunately, the TE was not able to interview the Deputy Director during his visit to IPA offices in Kampala, and those IPA staff members of IPA who were interviewed were not clear on the exact arrangements. Members of the international research group was asked to provide their own views on this issue but no comments were received by the deadline for reviewing the draft TE report.

⁷⁰ NAHI focuses on the development of market-based mechanisms to achieve conservation goals with an emphasis focus on small communities where capacity is weak and greater support needed, (e.g. advice on savings and corporative societies).

296. The Project has been generally very well managed and administered by the PMU and CSWCT. The Project team has proved very competent and they deserve credit for their efforts and success. For instance, having Community Monitors on the ground has kept the PMU present in communities, which, judging from TE interviews, has built considerable trust with the local communities and supported the commitment of PFOs to continue with the Project. In the TE's opinion, the support and advice from the Community Monitors is one of the key contributing factors why so many PFOs have stayed with the Project.

Project management challenges

297. Despite the successes, there were a number of project management challenges. One of these was the low capacity of the PMU to implement and coordinate such a complicated project. The PMU consisted of a Project Manager, field officer, administrative assistant, and field assistant along with the Community Monitors, based in Hoima. This was considered sufficient capacity at the design stage to deliver the Project, although the budget for the PMU was even then rather low given the timeframe and ambitions of the Project. However, the agreement to significantly increase the number of villages within the scheme and include a completely new area (Kibaale District⁷¹) following the first PSC meeting/inception workshop meant that there was a greatly increased demand on all Project partners, particularly the PMU and CSWCT. Unfortunately, this new area (Kibaale) required greater travel and necessitated a vehicle as the PMU was based in Hoima (some 1.5-2 hours drive away on largely poor roads). Despite these new requirements and increased work the budget for the PMU remained the same; in other words, the PMU had to do almost double the amount of work with the same amount of resources. Given these circumstances the PMU staff have done very well to deliver the Project and without the extra commitment from them and the CSWCT it is debatable whether the Project would have been delivered at all.

298. Another significant challenge for the PMU was managing and coordinating the activities and inputs of such a large group of project partners operating at different levels (global, national and local). The group of international researchers provided perhaps the biggest challenge in part because they were not in Uganda (so not available for face-to-face meetings), there were no formal contracts between them and the PMU/CSWCT, and they were focused largely on only one aspect of the Project – the research element. Also, it took time to set up the payment arrangements and negotiate with Post Bank, in part because of the constraints placed upon payment arrangements by the research team in order to minimise external influences on the PFOs in the treatment group.

Risk identification and mitigation

299. Risks were identified and mitigation measures suggested in the ProDoc, and adaptive management has clearly been applied by the PMU. 'High level' risks identified were a lack of interest by potential buyers of ecosystem services, and a lack of defined property rights. In terms of the latter, weak property rights acts as a disincentive to buyers and it was recognised at the design stage that there was a need to establish a formal proof of ownership as a precondition for a PFO to be recruited as a seller of ecosystem services from the forests. The large number of PFOs that need to be involved in the Project to ensure a sufficiently large statistical sample also introduced a risk of delays over establishing and authorising land rights. A further 7 'medium' level and 4 'low' level risks were identified. Mitigation measures were suggested in the project design documents but many are rather general and weak (unclear whether they would work).

300. Potential negative environmental, economic and social impacts of the Project were not discussed in project design documents. There is a brief 2-paragraph 'Environmental and Social Safeguards' section in the ProDoc that focuses on the Project's intended efforts to ensure gender issues are taken into account when considering selection of landowners to participate in the experimental and control groups and in PES payments. There is no specific mention of environmental safeguards, only that the 'PES scheme will be designed to raise the incomes of participating community members while improving the environment'

⁷¹ The CSWCT had little experience in this District and indeed there had been no previous work by any conservation NGOs in some areas of the District which meant that a greater amount of awareness-raising work was needed than for the Hoima District

(with the latter occurring further along the causal chain). However, it can be fairly argued that if the Project is successful it would reduce forest loss and degradation and thus improve the state of the environment, e.g. through improved ecosystem service provision and reduced GHG emissions.

The project's performance in implementation and management is rated Satisfactory.

2.14.3 Stakeholder participation, cooperation and partnerships

Stakeholder and partner involvement and consultation

301. A comprehensive partner and stakeholder analysis was undertaken during the PPG stage and a detailed Stakeholder Plan is presented in the ProDoc with information on each group that would be involved in the Project and their preliminary role. However, the list of stakeholders could perhaps have included better representation from the church, heads of clans and Kingdoms in initial discussions as greater endorsement by these three groups may have led to wider and greater uptake of the PES scheme, although to do this would have required a longer consultation period before the scheme began. Also, as mentioned, the identification of private sector partners at national level was rather superficial and a weak area for the Project (see section 2.11.1).

302. Stakeholder consultation and engagement during the project design period was good and well organized. During the initial phase of implementation, a template and framework for the Project was discussed with local communities, including contract arrangements, and potential participants were given around a month to study the contracts (in order to check over and discuss with their family). However, the need to introduce additional participants following the decision taken at the inception meeting to increase sample size to 140 villages, meant that there was less time to undertake awareness-raising and outreach among these communities before the project was due to begin. Importantly, the District authorities, who were supportive of the Project and its results during TE interviews, were involved right from the design stage, including discussions on the selection of treatment and control villages.

Project partnership relationships and issues

303. The Project had a large and complex group of partners who had well defined and negotiated roles and responsibilities (see section 2.4 and 2.6). Overall, the partnership developed well over the life of the Project and was largely successfully managed by the PMU and CSWCT but the involvement of a large number of partners with responsibilities for different activities created a complex project management coordination challenge that was underestimated at the project design stage. The mix of quite different partners, especially because the focus of the GEF project was on research, created tensions and conflicts between some partners on occasion. During much of the project, there was a clear division between those who believed the focus of the Project should be on the PES scheme (NEMA, CSWCT, NAHI) and those who were pushing for a research-focused orientation to the project (international researchers, UNEP), which created a split between partners.

304. Unfortunately, there was no direct MoU between the Principal Investigators in the research team and NEMA⁷² or the CSWCT, which can be considered to be a weakness in the project execution arrangements. Instead, the research group had a more informal arrangement with IPA, over which neither the CSWCT nor NEMA had control. This meant that lines of authority and decision-making within the Project's hierarchy were not clear, and this contributed to/reinforced the creation of the two distinct 'camps' within the Project with different views on what the Project was seeking to achieve and where Project resources/budget should be spent. This led to friction between some of the partners, with particular debate over the need to increase the sample size and its consequences. The apparent split in the

⁷² One reviewer commented that 'according to the NEMA-IPA MoU, IPA was responsible for the outputs of evaluation and it is expected that IPA had a formal working relationship with the international researchers'.

Project also led to some confusion among outside stakeholders, e.g. PFOs, private sector, about the identity of the Project and whether it was a research or biodiversity conservation project.

305. One significant point of conflict related to a failure of proper accreditation of the role and involvement of national partners in the 'impact assessment report', which lists only four international researchers as authors and (at least in the version seen by the TE produced in December 2014) does not mention or credit the huge effort that the field team ((PMU, IPA, CSWCT, NAHI, Community Monitors) put into collecting the data on which the results of the report are based. It is particularly disappointing that no Ugandan nationals are credited in the report. The TE understands that there will be an updated version of the report that will include improved analysis of the ecological data (see section 2.10.3 and 2.11.1). It is recommended that proper acknowledgement is given to all of those involved in the design and data collection and funding of the Project.

306. Another, related issue raised by some individuals is the question of who 'owns' the data collected by the Project. Article 6 of the MoU NEMA signed with its project partners sets out the arrangement dealing with intellectual property rights but does not specify who owns the 'primary research data', and this remains unsettled. At present, the socio-economic data collected by IPA is held by the international researchers in the US, while the forest biodiversity data is held by the CSWCT and NAHI in Uganda. Given that GEF is financed from public funds, in the TE's opinion, all data should be made publically available at some point (within 12 months of project completion). While it is recognized that academics can only publish their results in peer-reviewed journals if the data are original (i.e. have not been worked on and published by others), it is important that the data from this Project, which have not been fully analysed, are made available for others to examine and use. The World Bank has developed a useful model that requires data to be made available within a year of publication through uploading to a public data catalogue (J. de Laet *pers. comm.*), which could be followed here with upload to a secure Ugandan-based data base (NEMA?).

307. There was also a feedback from TE interviews that the international research team had not involved Uganda researchers sufficiently in the design or implementation of the research component of the Project. NEMA proposed 5-6 Ugandans to work with the research group but there was no effective collaboration, and no real opportunity for Ugandan academics to critique the design of the research element of the Project. Part of the problem was that the role of the national researchers in the Project was rather limited in the ToRs for the TC, although they were expected to 'provide a critique of the analysis and the papers prepared by the international scientist and partners at the national level'. Those appointed by NEMA attended most of the meetings of the TC, but feedback to the TE was that the international researchers did not seek to involve national scientists apart from in data collection. As a result, local researchers e.g. academics at Makerere University had knowledge gaps regarding the analysis of the data and did not participate in identifying or contributing to the conclusions and recommendations of the research aspect of the Project in any substantive fashion. The TE also understands that according to the conditions of the grant given by 3ie⁷³, national scientists were to have been actively involved in the research and the Project would help build capacity in Uganda for evaluation, but this does not seem to have taken place either. A number of interviewees felt that if Ugandan nations also had been more involved in the design of the research element it would have helped to tailor the design of the fieldwork more efficiently and led to a better understanding of local conditions and constraints.

308. On the other hand, the TE heard reports of unacceptable demands from national partners for greater involvement (and particularly a larger budget) in the Project, with IPA and NAHI seen as 'not terribly collaborative' by some of the other stakeholders. Again, these helped maintain the perception of two separate 'camps' within the Project with very different agendas and expectations of the Project, especially at the beginning of the Project. There was a feeling from 'both sides' that the research element had not

⁷³ <http://www.3ieimpact.org/>

been sufficiently discussed early or thoroughly enough (and parts were quite technical so needed time to be explained and absorbed) and its demands on the budget and partner time were underestimated.

309. Relationships between the national and international researchers could have been better arranged and supported, and it is recommended that UNEP and GEF provide clear guidelines at the concept (pre-PIF) stage on how research should be integrated into UNEP-GEF projects. For instance, all future MoUs should stipulate joint authorship and full acknowledgment of all those involved in any research publications, identify ownership of data and the fate of any samples or materials collected. Foreign researchers should also be expected to provide some targeted capacity building for national researchers if requested/required, paid for from GEF funds, and the involvement of national researchers should also be covered by the GEF funds. Project proposals with a significant focus on research should be reviewed in the light of the code of practice and guidelines. For GEF, this process could be incorporated as an extension to the standard STAP review, and for UNEP as part of the Project Review Committee (PRC) process. Such reviews could be informed by the systems developed by other development agencies/donors, such as those of DFID⁷⁴ or The World Bank which has an ethics review board that assesses every project and proposals are also reviewed by the relevant country teams (J.de Laat *pers comm.*).

Recommendation 6. *It is recommended that both GEF and UNEP establish a code of practice and guidelines for research within GEF projects, including guidance/best practice on how non-national researchers should undertake research within a country, how they should collaborate with national partners and researchers, e.g. permits, co-financing of nationals, MoUs, authorship of publications, consultation/negotiation structures for agreeing on research, etc, as well as guidance on ownership of any data and field samples. Within UNEP, this should be a generic guidance document produced by the GEF coordination unit and used by the PRC as a checklist at project design and later by the individual TMs to ensure researchers were acting appropriately. The current UNEP PCA template could be modified to include a clause that stipulates that the same ownership and copyright clauses should be included in both primary contracts with executing bodies and with any groups they sub-contract to carry out tasks for the Project. Responsibility: GEFSEC, UNEP, including EMSP Coordinator and GEF Unit. Timeframe: During design of any future GEF projects that include significant research element and includes non-national researchers.*

310. It should be noted that the international partners (IIED and members of the international research group) did make periodic visits to Uganda as well as held some teleconferences to help plan activities and discuss progress, but the lack of funds (particularly during the design phase) restricted the opportunity for more frequent visits and face-to-face meetings which would have helped build a common understanding of the project and its elements and trust between the partners. Unfortunately, this lack of funding handicapped the Project and in future GEF projects should ensure that there is sufficient consultation at very early stage between the research team and the PES scheme teams to enable them to work through the design so that everyone is in agreement.

Lesson 7. It is important that there are sufficient (financial) resources to allow the different constituencies in a project – in this case research and biodiversity conservation/development - to be able to meet face-to-face, especially where the design of a project is particularly innovative and untested, such as this one, in order to build and maintain a common vision of the Project, understanding of each partner's position and needs (as these are often very different), and trust between the groups involved. Without these, disagreements and misunderstandings can result which can reduce the potential for successful delivery of a project.

311. Although partnership roles and arrangements were relatively clear with most key partnerships governed through MoUs with the executing agency (NEMA), there was no project-specific Partnership Strategy, which set out who would be involved (and why), how, when and with what resources (with a

⁷⁴ DFID (2011). 'DFID ethics principles for research and evaluation'. 2pp.

budget to facilitate involvement), developed during implementation (now required by UNEP⁷⁵), which is surprising given the number of partners involved. This would have helped focus greater attention on partnership development and perhaps helped to avoid/resolve some of conflicts/disputes between partners from early in the Project.

312. In some ways the partnership arrangement was as much an experiment as the PES scheme itself. However, despite the differences, the partners have managed to work together. Working relationships would have probably been easier if there had been sufficient funds to fully accommodate the PES scheme (better payments to PFOs to offset their costs and scheme run for a longer period) and research needs (large sample size, multi-year monitoring of the scheme).

Local stakeholder relationships

313. The Project has built very good relationships and provided good support to local communities. The PMU undertook a series of awareness-raising/outreach activities in the early stage of Project implementation to ensure that local stakeholders could participate (built their capacity to be involved) and the Community Monitors continued to provide direct support to PFOs throughout the life of the Project. The main criticism received by the TE was that there had not been enough consultations with local communities over the determination of the level of the PES payments, which were seen as generally too low (see section 2.10.1 and 2.12.2).

314. However, engagement with local government authorities was less clear. The TE heard quite different views on the relationship between the Project and District-level authorities. TE interviews suggested that there had been a good working relationship, and the DFO in particular saw value in the Project. In addition, participation of Project staff in District and Subcounty meetings formed an important avenue for receiving feedback on the Project's social and ecological effects at District and Subcounty levels and potential risks to the Project. However, an independent study of the impact of the Project on local governance (see section 2.11.1), suggests that the District authorities had significant reservations about the Project, at least during the first year of the PES scheme, and sub-District government authorities, e.g. parish councils, which have an environment committee which takes decisions on water resource management, were minimally involved in the design and implementation of the Project. There was also little linkage between Project activities and the agricultural sector in the two Districts.

Government of Uganda involvement

315. Although NEMA provided technical oversight of the project, a venue for Technical Steering Committee meetings and audit services in partnership with the office of the auditor general, it was seen as having a rather 'hands off' approach to the Project, and not proactive by many partners, although to be fair NEMA did not have the capacity to execute the Project, which is why day-to-day management was contracted out to the CSWCT.

Linkage and lesson learning with other initiatives

316. The ProDoc lists a large number of relevant GEF and non-GEF projects across the world (including PES, SFM and REDD+ projects), and the intention was to explore opportunities for cost-sharing on common activities, events, lesson learning, and other linkages and synergies where appropriate. However, other than invitations to attend Project workshops, no mechanism was developed to link and work with them, and few direct collaborations with these projects have taken place. In the evaluator's experience, this is common among GEF projects – much is made of potential linkage to other relevant GEF and non-GEF projects in project documents but when it comes to implementation there is little, if any, interaction (and usually no specific budget for this). This is an area that UNEP should pay greater attention to. For instance,

⁷⁵ A specific partnership strategy, developed as part of the project document, has been a requirement of UNEP-managed projects since November 2014.

the there was no substantive contact, collaboration or sharing of results and lessons learned with any other projects within UNEP's portfolio, even other UNEP-GEF projects focused on ecosystem services e.g. UNEP-GEF 'Promoting Payments for Environmental Services (PES) and Related Sustainable Financing Schemes in the Danube Basin' project⁷⁶, and the UNEP-GEF Project for Ecosystem Services (ProEcoServ) project⁷⁷ as well as UNEP's The Economics of Ecosystems and Biodiversity (TEEB) project⁷⁸, which been dealing with similar themes and challenges but taken different approaches and found different solutions. In addition, the Project could have benefited from linkage with UNEP's Ecosystems Services Economics Unit⁷⁹, that may hve been able to provide information (or linked with others who could have provided it) on the economic (and social) cost-benefit analysis of forests and their management that could have been used in the first year of the Project as part of background material to advocate for increased funding for the PES model, and could have offered some constructive advice on ways to effectively engage with the private sector.

317. In the TE's opinion, it would be valuable if UNEP undertook a joint lesson learning exercise of all current and recently completed projects with a focus on PES as this could add additional value to each project and provide a higher-level programmatic perspective. Given that there are projects within the portfolio that are focused on developing PES at a local level (this project) and covering a number of habitats (Uganda Project, Danube Project), examining the effectiveness of the PES approach to deliver biodiversity and socio-economic benefits (Uganda Project), and mainstreaming ecosystem services thinking into national level policy and planning (ProEcoServ Project), bringing together the relevant teams to exchange experiences would add extra value to the portfolio which has been lacking a more programmatic and strategic analysis to date and which would help improve the sustainability, replication and catalysis of project results, and impact of individual projects, as well as helping UNEP to identify the most important issues and priorities for action in relation to its work on ecosystem services, and therefore what projects and initiatives UNEP should it be developing, supporting and funding.

Recommendation 7. *It is recommended that a review of all PES and ecosystem services valuation projects in UNEP's portfolio (both GEF and non-GEF funded) is undertaken to draw out common experiences, good practices and lessons learned, to identify what worked and why and (as important), what didn't and why. This should result in a specific publication. Responsibility: ESEU, other relevant units in DEPI, UNEP GEF Coordination Office, GEF Task Managers and individual project managers, and coordinated by the EMSP Coordinator at UNEP. Timeframe: By March 2016.*

318. There was also no significant linkage to other Great Ape conservation initiatives e.g. GRASP which was disappointing, especially because many of the Great Ape interventions are in forests at high altitude which similarly supply water for communities downstream so there are obvious parallels and potential lessons for sharing. Also, there has been little substantive interaction between the Project and other UN agencies such as UNDP, which has a developed programme on ecosystem services including a number of PES projects.

319. In future, UNEP needs to make sure that one of the specific tasks of UNEP TMs for GEF projects should be to identify, establish and support linkages to other UNEP and GEF projects and this should be included in the TM's work plans and reported on in PIR and annual TM reports. Project Managers and

⁷⁶ See https://www.thegef.org/gef/project_detail?projID=2806

⁷⁷ <http://www.proecoserv.org/>. The project aims to pilot the bundling of ecosystem services and the integration of ecosystem services approaches into resource management and decision-making. The overall goal of the project is to better integrate ecosystem assessment, scenario development and economic valuation of ecosystem services into sustainable national development planning.

⁷⁸ <http://www.teebweb.org/>. This is a global initiative focused on drawing attention to the economic benefits of biodiversity including the growing cost of biodiversity loss and ecosystem degradation. TEEB presents an approach that can help decision-makers recognize, demonstrate and capture the values of ecosystem services & biodiversity.

⁷⁹ <http://www.evaluation.org/index.php/eese-unit>

national and local executing agencies do not have the comparative advantage here; this needs to be the responsibility of the UNEP TM.

Stakeholder participation, cooperation and partnerships is rated Moderately Satisfactory.

2.14.4 Communication and public awareness

320. The Project had a specific Component (III) targeted at communications activities that originally represented a significant proportion (11.7%) of the budget (see section 2.14.6). The PMU developed a Communications Strategy in 2012⁸⁰ to aid and coordinate the communications activities and better disseminate Project messages, results and lessons learned. While this document covers all relevant aspects, the TE feels that in order to be effective there needed to be a more in depth assessment and presentation within the Communications Strategy of the needs of the different audiences to which the communication activities were aimed at, an expanded statement of key Project messages and a better understanding of the most effective media to use for the different target audiences (there was no detailed assessment of this). National Government personnel (forestry and non-forestry), funding agencies, the NGO community, the PFOs, private sector, academia, politicians and other relevant decision-makers and partners all require different approaches and media, which means that communication materials need to be carefully tailored. Nor does the Communications Strategy adequately examine existing communication channels and networks used by key stakeholders that could have been co-opted, nor the capacity of target groups to take up messages. It is also not clear whether the Project provided adequate channels for feedback on project activities and efforts as stakeholder comments were not presented and reported on in Project reports seen by the TE (although the standard UNE-GEF reporting structures do not allow for this), except the reports from the PSC and TC meetings.

321. Nevertheless, the PMU, CSWCT and (to a lesser extent) NEMA have produced many articles and presentations over the lifetime of the Project (see Annex 8). This has helped raise the profile of the Project and its key messages, which judging from TE interviews has been most successful at the local level. However, awareness of the value of ecosystem services is apparently still very poor among local government officials in the region, so, for instance, they still approve titles to land which should not be given.

322. The Project has had some success at the national level, although interviewees commented that other Government ministries still do not see the financial/economic benefits of the PES model, so there is still a need to promote the argument (cost-benefit analysis for PES) more forcefully in order to raise its profile with government-level decision-makers, especially to non-environment sector ministries and agencies. Unfortunately, there has been no coherent strategy and plan for advocacy and mainstreaming of project results into government and private sector (beyond simply publicizing results) and replication of Project results remains unfinished (see section 2.10.3 and 2.12.5). The lack of a strong statistically significant trend in deforestation and results showing strong socio-economic benefits to local communities from the PES scheme does not help here.

323. Some of the communication and project dissemination materials and reports reviewed by the TE are clearly not effective, and overall, key Project messages still need to be extracted from the various project reports and promoted better. For instance, the 'impact assessment report' produced by the international research team, is much too technical, it lacks an executive summary, it does not discuss the implications for policy, and is not in a format that is accessible to most end users e.g. policy makers, conservation practitioners, general public.

⁸⁰ Developing an Experimental Methodology for Testing the Effectiveness of Payment for Ecosystem Services to Enhance Conservation in Production Landscapes in Uganda. Project Communication Strategy. September 2012.

Recommendation 8. *It is recommended that the results and conclusions from the analysis of the research data are summarized in a 2-4 page policy briefing document that also sets the results in the policy context (perhaps written by someone with experience of developing policy papers for government), and also produced in the form of a 2-4 page summary sheet for conservation practitioners and a general audience (written by a journalist or someone skilled in writing technical briefs for a general audience). Responsibility: International research team, CSWCT, NEMA, professional writer. Timeframe: After revision and updating of the 'impact assessment report', following completion of all data analysis.*

324. As expected, the Project is least well-known outside of Uganda, although there was some participation by members of the Project team in international workshops and meetings e.g. a side event on the Project at the CBD Conference of Parties, joint publications with Katoomba Group. Surprisingly though, as mentioned previously, the Project has a poor profile and is poorly linked with other relevant projects within UNEP (see section X.X), suggesting a lack of internal promotion and coordination by the UNEP TM. UNEP could also perhaps have provided more support and advice on communications and outreach through its Division of Communications and Public Information (DCPI), which could at least have helped to promote the Project's aims and results more widely within UNEP and at the international level.

325. It is also suggested that the Project team investigate linkage to the UNEP-supported Global Universities Partnership on Environment and Sustainability (GUPES)⁸¹, which seeks to increase the mainstreaming of environment and sustainability practices and curricula into universities around the world as this might offer opportunities to promote and mainstream some of the Project's results more widely.

326. The Project looked to increase understanding of PES, and this is reflected by a specific indicator within the logframe for Outcome 2 indicator - 'Increased level of knowledge on PES and its importance in BD conservation understood by community, technocrats and private sector'. It should be noted, however, that no quantitative data were collected on levels of awareness or knowledge before or during the Project, and the 'raised awareness' reported in Project documents is based only on subjective assessments by project staff and not any rigorous assessment of the uptake of information. Consequently, the effectiveness of the Project's communications efforts cannot be directly assessed.

The project's performance in ensuring communication and public awareness is rated Satisfactory.

2.14.5 Country ownership and driven-ness

327. Whilst the Project is in line with national priorities (see section 2.9.2), there is a question over the degree of its national ownership and who drove the project design process.

328. The Project was initially developed jointly by the CSWCT and NEMA, and the original goal was to establish a simple PES scheme in the Hoima District covering most if not all of the patches of forest important as a corridor for chimpanzees. NEMA was interested in providing incentives for conservation at local community level given the high level of privately owned forested land in Uganda, so a project centered in a PES scheme was considered highly relevant. After preliminary discussions between the CSWCT and NEMA and development of a project concept, a meeting was held with UNEP staff in Nairobi.

329. After feedback on the concept idea from the GEF Secretariat and an individual at the STAP⁸², UNEP was of the opinion that the project needed to be more innovative and should be used to test the PES

⁸¹ <http://www.gupes.org/index.php?classid=3234>

⁸² There was encouragement at the time from the GEF Secretariat to incorporate greater research and testing into GEF projects. It was also a period when a new CEO took over at GEF and the pipeline of projects was temporarily suspended pending review and the Implementing Agencies such as UNEP were under pressure to justify their comparative advantage. UNEP was seen as the IA that had the comparative advantage in science, and should be promoting more scientific research in its projects.

model, and the UNEP TM at the time was seeking to promote greater research, particularly randomized control studies, within GEF projects. Consequently, the UNEP TM recommended that the Project to be (re)orientated as a randomized control research project that would test the PES approach and the UNEP TM introduced the initial Principal Investigator⁸³ and IPA to the Project, with more non-Ugandan researchers joining the Project. It was at this point, according to interviewees, that the research element became the dominant focus of the Project, even though NEMA was much more interested in an intervention to reduce forest loss and degradation; the government was less interested in the research angle⁸⁴.

330. A Project Identification Form (PIF) proposal was developed and agreed with NEMA (evidenced by letter of endorsement from the Uganda GEF Operational Focal Point) and the Project entered into the GEF work programme (so the research focus was fixed). The UNEP Task Manager left UNEP shortly thereafter to begin a PhD at Stanford University (one of the Project's international research partners) and used some of the data generated by the Project for her PhD work⁸⁵.

331. Disappointingly, no national researchers were involved with the design of the research element of the Project, the analysis of the data collected under the research element or writing up of the results, and, as mentioned, Ugandan researchers played only a small role in the implementation of the Project, which is judged a weakness of the Project. Furthermore, research permits were required for field data collection by IPA from the National Council for Science and Technology (NCST)⁸⁶ but the permit only lists very general conditions, and these agreements were with IPA and not with the international researchers anyway.

332. Thus the Project appears to have begun with a high-level national ownership of a project idea (developed by the CSWCT and NEMA) but at the PIF stage the project was reformulated more as a research project by UNEP, with non-Ugandan researchers responsible for a large part of its design and associated budget, and low national ownership of the research element.

Country ownership and driven-ness is rated Moderately Unsatisfactory

2.14.6 Financial planning and management

333. A project budget is presented in Appendix 1 of the ProDoc. There is a large difference in the funding identified for the different project components. Component I which focused on establishing and testing the PES scheme, comprised the majority of the budget, and a large element of this was for payments to the PFOs for carrying out forest conservation activities and data collection by IPA and NAHI and for undertaking analysis of the research data. A relatively small budget was assigned to Component II for capacity building (largely for training 'in the application of land-uses to maximise biodiversity maintenance' and for decision-makers and technical staff on PES), which can be questioned as probably inadequate to ensure sustainability and replication of the PES approach, although the final budget was increased a little. The budget for dissemination of project results (Component III) is not clear as much of this seems to be for

⁸³ The PI had previous impact evaluation experience and has for the last three years been programme manager for the Strategic Impact Evaluation Fund for The World Bank.

⁸⁴ If the research element had not been included the PES scheme would have focused on a single District and for a longer period.

⁸⁵ She remained involved as one of the international research team (and indeed is credited as one of the four authors on the 'impact assessment report') and attended the first PSC meeting. There could be a perceived conflict of interest here in that a UNEP staff member influenced a project design from which she later directly benefited. However, the former TM did not begin her PhD research thesis until two years after she left UNEP by which time the project was well underway, was invited back to the Project by one of the PIs, and only used initial baseline data from the Project for just one of the chapters in her PhD (another looked at another PES project in Uganda). Also, according to the UNEP EO, there is no conflict of interest under UNEP rules here and UNEP has no issue with data from its projects being used as part of a PhD.

⁸⁶ The UNCTST assesses and approves permits for research in Uganda, and NEMA is represented on the Council. If researchers are working with an accredited institution such as Makerere University then they are themselves accredited, but if the institution is not e.g. IPA, then they need a separate research permit, which amongst other things requires annual progress reports and a payment of the fee. <http://www.uncst.go.ug/>

project management activities, e.g. PSC and TC meetings (US\$68,000) which should have been treated as part of Component IV. There seems to have been relatively little for direct communication and dissemination activities and the Project relied heavily on its partners to promote its results, e.g. through their own websites. The source of funding for the proposed replication plan to be developed by NEMA under Component III is unclear, but appears to have been part of NEMA's co-financing contribution.

Table 7: Summary of project expenditures

Component/ Sub-component/Output	Estimated cost at design	Actual cost	Expenditure ratio (actual/planned)
COMPONENT I - Piloting of PES scheme(s) using a randomized design and other experimental methodologies	650,000	636,363	97.9%
COMPONENT II - Strengthening technical and institutional capacity to design, implement and monitor PES schemes	31,000	47,168	152.2%
COMPONENT III - Generating, developing and disseminating a replicable PES model (s) based on lessons learned and best practices	102,000	55,908	54.8%
COMPONENT IV - Project Management	87,000	100,562	115.6%
Total	870,000	840,000	96.6%

334. The estimated and actual costs as well as the expenditure ratio (actual/planned) of the Project are summarized in Table 7 above. As can be seen from the figures in the table, the actual project costs up to 31 December 2014 amounted to 96.6% of the original budget, which reflects the largely on-target delivery and spending of the Project. Delays in the early part of the Project caused spill over between years and resulted in small under- and over-expenditures. The most significant discrepancy in budget lines is that for Component III, but this was to include the estimated US\$30,000 allocated for the TE, which had not begun at the Project closure date of 31 December 2014. At 12 June 2015, only USD\$1800 was left in the budget (for final reporting). Spending on subcomponents was more or less in line with what was expected (Table 8).

Table 8: Breakdown of budget by subcomponent

Component/sub-component	Estimated cost at design	Actual Cost	Expenditure ratio (actual/planned)
Project Personnel component	237,636	183,278	0.77
Sub-contract component	476,364	532,609	1.12
Training component	111,000	92,555	0.83
Equipment and premises	14,000	19,039	1.36
Miscellaneous (Audits, MTR, TE etc)	31,000	12,520	0.404
Total	870,000	840,001	0.966

335. There was some reallocation of funds between budget lines following the first PSC/inception workshop, with for instance, more funds for the socio-economic surveys undertaken by IPA. As mentioned, budget reallocation caused some friction between partners⁸⁷.

Project cost-effectiveness

336. Project cost-effectiveness is given in section 7.3 of the ProDoc, but this deals with the ‘cost-effectiveness’ of the PES approach compared to other conservation options and only in very general terms (and this has yet to be calculated for the Project). Since most activities were to be conducted locally, through locally or nationally based partners, and the PMU and Community Monitoring team were located in the target region, the Project aimed to be as cost-effective as possible with minimized travel costs, for example. Input by international experts has also been deliberately limited and most was covered through co-financing, e.g. IIED PES expert paid for through IIED’s own funds. However, as mentioned, this meant that the international members of the Project were not able to visit Uganda as often as they would have liked to check on field work and attend meetings, e.g. PSC meetings.

Project co-financing

337. In terms of project co-financing (Table 9), the total of US\$1,232,400 was confirmed as being available when the ProDoc was signed. This was considered a good level of co-financing given that this is a GEF MSP and seen as an experimental project that was not expected to have immediate direct outcomes and impacts.

338. However, most of the original co-financing was tied to already agreed activities to be provided by partners, e.g. Katoomba Group provided their own training courses, so there is a question over the flexibility of the use of the non-GEF funds, and which limited adaptive management during project implementation.

Table 9: Summary of project co-financing

Co-financing Source (cash and in-kind)	Amount (USD)		Comments
	Planned	Actual	
NEMA	500,000	253,049	
CSWCT	100,000	363,149	Includes joint Darwin Initiative grants with IIED
Katoomba Group	150,000	153,983	
UCU/UQAM	32,400	32,400	
NAHI	70,000	69,182	
Hydromax	80,000	0	
IIED	300,000	299,772	Includes joint Darwin Initiative grants with CSWCT
IPA	0	219,945	Through 3ie grant
Co-financing totals	1,232,400	1,391,480	
GEF grant (excluding PPG)	870,000	870,00	
Total GEF+ co-financing	2,102,400	2,261,480	

⁸⁷ CWSCT commented that ‘(the) budget discussion largely affected NAHI component (and that) NAHI and IPA were sharing the evaluation budget and NAHI was a sub-contractor of IPA under the evaluation budget. In the end, the NAHI had to do one round of surveys and left the other part for satellite images (the end line survey).’ The budgets of the other partners remained the same, e.g. the CSWCT used two Darwin co-financing grants.

339. Unfortunately, not all of the co-financing pledged at the PPG stage materialized. In particular, US\$80,000 in co-financing pledged by Hydromax was not delivered even though Hydromax attended most of the PSC and TC meetings, and NEMA did not provide US\$60,000 as cash co-financing that was to be used to (among other things) purchase and run a project vehicle. At the time of the Project's design GoU support for NEMA was increasing so it was expected that NEMA would contribute its cash co-financing. However, the level of funding from central Government did not materialize (NEMA lobbied the Ministry of Finance for more resources but was not successful). However, although NEMA failed to provide its cash co-financing, the input from the NEMA team, especially the project Coordinator, was probably much more than originally costed, especially in relation to the follow-up to incorporate the PES approach and results from the Project into the revision of the National Environmental Policy and Act. It could be said that NEMA was technically committed but was not able to realise its financial commitment as promised at design.

340. The decision to increase the number of villages in the Project to 140 placed extra financial demands on the project partners, particularly the PMU and research group. Consequently, additional leveraged co-financing had to be found. Although partners provided additional support and some were successful with raising extra funds, there was still insufficient funds to complete the research analysis. This Project illustrates just how expensive and demanding even relatively simple field research projects can be and GEF needs to consider much more carefully the potential costs of including research within GEF-funded projects, or indeed whether they should be funded by GEF at all, rather than by an established research funding body.

Lesson 8. Using a randomised experimental design, with treatment and control groups, to test a PES scheme in the field requires a large sample size to increase the likelihood of being able to answer the research question(s) posed – in other words, there is sufficient statistical power to detect significant differences). Consequently, the budget for this type of field research can be very high. Given that funding from GEF is limited, especially for MSPs, GEF may not be the most appropriate body for funding field research involving many communities and covering large areas and with complicated logistics.

Leveraged and in-kind contributions

341. Due to the shortfall in co-financing offered at the PPG stage and the need to find additional funds due to the increased sample size following the first PSC/project inception meeting, various attempts were made to find additional co-financing.

342. Some co-financing was secured from a UK Darwin Initiative grant to IIED and CSWCT for a project titled 'Harnessing Livelihood Benefits from a Payment for Environmental Services scheme', the main aim of which was to demonstrate short-term and long-term commitment to conserve chimpanzee corridors using a designed PES scheme⁸⁸. A total of UK Sterling 162,577 was leveraged for a period of 2 years (April 2013-March 2015) and some members of the project team (mainly the Community Monitors) were funded from this financing. The CSWCT also committed some equipment including a field vehicle and a motorcycle, GPS units and cameras, as well as field gear for Community Monitors donated to the CSWCT by Blank Park Zoo in the US. As mentioned, NEMA did not provide cash co-financing so the CSWCT had to terminate one of their projects earlier than expected to make a vehicle available for the Project.

343. The Katoomba Group and Forest Trends also leveraged additional resources for training activities under the PES project in addition to capital support to the PMU office. The additional resources leveraged were contributed by USAID/Translinks project, UNDP/GEF Project, NORAD and Flora Family Foundation.

⁸⁸ The project had 2 main outcomes; (i) the designed PES scheme will deliver additional livelihood incentives to demonstrate its long-term commitment to improved social welfare and enhancement of conservation outcomes; and (ii) that more than 50% of contracted forest owners engaged in additional forest based enterprises that ultimately improve their short-term and long-term household income potentials thereby making biodiversity conservation a more attractive land-use option. These are proposed as woodlot establishment, bee keeping and community based tourism.

The total contributions of \$33,983 covered staff time, publications and materials, travel expenses and conference fees.

344. The international research team, in association with IPA, secured US\$219,945 from 3ie (International Initiative for Impact Evaluation) to support analysis of the data gathered from the scheme, particularly to support the analysis of the effect of the PES scheme on the socio-economic welfare of beneficiaries⁸⁹. This prioritization of the 3ie funding on the socio-economic analysis partly explains why the analysis of the spatial data has not been completed (there have been insufficient funds to finish the analysis of the ecological and biodiversity data). 3ie also financed a visit for the Director of the CSWCT and the Principal Investigator to attend a meeting in Italy in 2011.

345. GEF funds paid for the attendance of the international researchers at PSC meetings and visits to Uganda and some GEF funding was made available for the data analysis undertaken/directed by the researchers. However, the involvement of the researchers themselves was mostly covered through in-kind co-financing through their universities and host institutions and not directly through GEF funding, although, the funding arrangements between IPA, which received a significant proportion of the GEF funding (over US\$250,000 according to the ProDoc), and the international researchers were unclear. Given the amount of time the researchers gave to the Project during the design and analysis phases, it is likely that their contribution, measured in terms of co-financing, has been underestimated (the final project report only shows the contribution of US\$32,400 from UCU/UQAM, and don't include the input from the researchers at Northwestern and Stanford universities in the US).

346. The time contribution from individual UNEP personnel, who provided oversight of the various Project activities, attended meetings, workshops and reviewed documents, and carried out financial management, is likely to have been more than originally expected as the Project was awarded a 6-month NCE.

347. In the end, the Project partners managed to leverage additional co-financing to meet the shortfall in the original pledged co-financing, and indeed the total co-financing – pledged cash and in-kind and additional leveraged cash and in-kind – added to more than the original budget for the co-financing (US\$2,261,489 versus US\$2,102,400). The Project partners deserve praise for this. Without this leveraged co-financing it is unlikely that the Project would have been able to run the PES scheme or deliver the analysis of any of its research data and the Project would probably have had to be closed down.

Financial management and reporting

348. The financial and administrative arrangements, including the flows of funds, are not clearly described in project design documents, although the ProDoc does present a budget according to UNEP budget lines. According to interviewees, the usual UN procurement processes were applied by the CSWCT and NEMA through a competitive bid process with a minimum of three bids required.

349. GEF funds were provided through UNEP which were then routed through NEMA to contractors, mostly CSWCT. There were no significant difficulties in financial management or reporting mentioned by TE interviewees. However, there have been delays in NEMA submitting financial reports, which has been partly a reflection of low capacity within NEMA, and partly the complex partnership and contracting process (organised through a series of MoUs). So, for instance, work and spending undertaken by NAHI had to be reported on to IPA which then reported to the CSWCT who sent the report and accounts to NEMA who then consolidated information before forwarding them to the Financial management Officer (FMO) at

⁸⁹ Income, consumption levels, self-reported measures of well-being, and drivers of well-being, including livelihood choices, allocation of labour across different income generating activities such as forestry, agriculture, and other employment, the level of migration, etc. as well as social and economic interaction with neighbours and attitudes toward conservation.

UNEP in Nairobi. Any delays in completion of activities therefore slowed down their financial reporting. However, these delays were not generally considered serious.

350. There was however a significant delay in completing the project audit which led to delay of receipt of funds from UNEP and as a result, field data collection activities were suspended between August and September 2014. NEMA and UNEP resolved the issue and field activities resumed later but it meant that the Project's expected completion date was later than planned (December 2014). Overall, however, the schedule of the project was only marginally affected.

Overall project financial planning and management was Satisfactory.

2.14.7 Supervision, guidance and technical backstopping

351. UNEP supervision was largely provided through a Task Manager (TM) based in Nairobi. There were three TMs during the Project's lifetime, the first one covering the period 2008-2009; the second took over in 2009 (at end of the PIF stage, so the Project's design was already largely approved); and the third TM took over the Project following the retirement of the second TM in October 2014. Thus the second TM was responsible for the majority of the project period, from the PPG stage up until the final stages of implementation in October 2014, although the first UNEP TM also contributed advice to the Project's development during the very early part of PPG stage (as part of hand-over to second TM). This continuity made it easy for the Project team to deal with UNEP administrative requirements. The TM ensured that the workplan and reporting were carried out as close to time as possible, and supervision and support by the TM was considered good by the Project partners.

352. A Project Steering Committee (PSC) was established comprising members from UNEP, NEMA, CSWCT, IIED, NAHI, IPA, Katoomba Group, the private sector (Hydromax), and some of the international research team involved in the design and analysis of the data from the Project (indeed one of the PIs chaired the first PSC meeting). Given the technical, administrative and managerial complexity of the Project and the number of partners with key tasks involved, an additional Technical Committee (TC) was convened by NEMA. This comprised representatives from key Ugandan stakeholder institutions (government, local government, private sector and non-governmental organizations) to oversee implementation of the Project's approved plans and budgets and advise on technical issues. The TC was also seen as a route to facilitate uptake of the findings of the Project more widely within government and the private sector. However, although the ProDoc has ToR for the PSC none are presented for the TC and its operation is only described in general terms.

353. Meetings of the PSC and TC are listed in the Project's Workplan, and an adequate budget for their operation was identified at the project design stage. The PSC was to meet once a year and the TC twice a year, although there were 5 meetings each of the PSC (18 June 2010, 11-13 July 2011, 25-27 September 2012, 21-24 October 2013, 29 August 2014) and 6 meetings of the TC (7 February 2011, 7 July 2011, 12 April 2012, 22nd May 2013, 20 December 2013, 28 August 2014) during the Project's lifetime. Some of the PSC and TC meetings were held in Hoima with a field visit during which members were able to see interventions on the ground and interact with beneficiaries (e.g. October 2013 meeting of the PSC).

354. Both the PSC and TC were regarded as generally useful but their main value was for information dissemination on the Project. They were considered less useful for providing technical input. The TC did make some useful suggestions, such as a recommendation that contracts should be signed by the spouse of the PFO to help ensure that the whole family agreed with the contract and payment being offered, and also benefit women much more. TC also recommended that lawyers should review the contracts and gave advice on the payments system, e.g. manner in which Post Bank paid the PFOs (PMU was to deliver cash to the PFOs which would have been not only risky but impractical in the situation). Consequently, the TC injected some realism into the field arrangements, and was useful in helping to ensure that the scheme could function effectively.

355. However, at least some members of the TC felt that they did not have the competence or specialist knowledge to comment on the research aspects of the Project (and in some cases the individual concerned dropped out of the TC), so the research element went largely unchallenged by the TC and was not critically evaluated by the TC members. Some TC members also expressed the view that the biodiversity elements of the project were not sufficiently prioritised and reported on; rather the socio-economic aspects dominated the research element. Unfortunately, there was also a high turnover of individuals from some of the stakeholders represented, and some members of the TC only attended 1-2 meetings e.g. Economic Policy Research centre, and the TC's role of promoting Project results and messages among these groups has been limited.

356. The TC was most concerned about sustainability issues and established a working group on sustainability to address this issue following the MTR validation workshop in January 2013. Their report was presented to the TSC in December 2013 but, according to interviewees, the TC failed to come up with any workable solutions (evidenced by no follow up funding for the scheme – see section 2.12.2).

357. Other feedback on the TC suggested that it would have been more effective if more meetings had been held in the field so that participants could more regularly see progress and challenges first hand and have the chance to interact directly with the PFOs, project team and local communities.

Overall UNEP supervision and backstopping were Moderately Satisfactory.

2.14.8 Monitoring and evaluation

M&E design

358. The M&E was designed according to UNEP's standard monitoring and evaluation procedures. As noted, the Project's logframe included objectively verifiable indicators of achievements, sources and means of verification for the Project outcomes and outputs, and a timeframe for monitoring activities is specified in Project's Monitoring and Evaluation Plan. Organisational arrangements and responsibility for project level progress monitoring were clearly specified in project documents.

359. The Project identified a specific and largely adequate budget for M&E under component IV, which was used to monitor project progress in implementation against outputs set out in the logframe. However, key elements of the M&E, notably the preparation of project reports and PIRs and the MTR and TE were listed as activities and budgeted under Component III in the project document, although moved to Component IV following a recommendation by the MTR. It should be noted that the costed M&E plan presented in Appendix 7 of the project document is only partly complete (lacks information for outcomes 1 and 2).

360. Most of the milestones set out as mid-term and end of project targets in the logframe and list of key deliverables and benchmarks in Appendix 5 and 6 of Project Document were relevant as indicators of delivery of project outputs but not sufficient to foster monitoring towards progress of outcomes and higher level objectives. Consequently, progress towards achievement of outcomes and higher level aims was poorly measured and largely subjectively recorded in project reports, e.g. the project's Final Report.

361. Baseline for the outcome indicators is reasonable although mostly qualitative, e.g. 'there is limited knowledge and training on PES schemes in Uganda'. Some baseline data for the indicators were collected during the PPG period (at the time of project approval 70% of the baseline data were considered available) and expanded and deepened during the first year of implementation. A plan for collecting the necessary baseline and monitoring data is presented in Appendix 5 of the ProDoc. The main additional data that needed to be collected related to individual land parcels for the treatment (conservation activities) and control areas.

The M&E design is rated as Moderately Satisfactory.

M&E plan implementation

362. Most M&E activities are treated as part of project management (Component IV) by the Project, although as mentioned above some – notably the MTE and TE – were listed as activities under Component III, which more correctly deals with dissemination and mainstreaming of project results.

363. Organisational arrangements and responsibility for project level progress monitoring are specified in project documents. The PSC and TC were to both play a role in M&E activities (particularly the PSC), but apart from some members reviewing reports, they did not contribute significantly according to interviewees. The information provided by the M&E was used by the PMU to improve project delivery and to adapt to changing needs. The action of compiling the annual PIRs and feedback from the UNEP TM on these was considered particularly valuable to the PMU as they highlighted what was useful and unsatisfactory and needed corrective actions.

364. Reporting requirements were largely fulfilled throughout the Project, with quarterly expenditure reports and cash advance requests, 6-monthly progress reports and Project Implementation Reviews (PIRs) submitted largely as planned (although there were some delays on some 6-monthly progress reports). There was generally good reporting on activities and outputs in project reports, particularly in the PIRs, but reporting on achievement of outcomes and project objective less so, again largely due to the lack of appropriate indicators. The risk log in the PIR was updated and expanded following recommendations of the MTR.

365. However, the Project's Final Report produced by the PMU would benefit from being revised and expanded (and updated once the research analysis is complete). It is suggested that the revised report also contains an overall assessment of achievement of the Project's objective and outcomes and the linkage between outputs and objective and results; a financial summary; a strengthened sustainability section; an expanded discussion of the implications of the Project's results for wider policy and practice; and recommendations on how the Project's results should be used with next steps (what, where, how, who, how much, etc) set out. These omissions are not the fault of the PMU, CSWCT or NEMA but a reflection of the limited structure (provided by UNEP) for the report, which it does not allow for full reporting on the projects results, successes and challenges, lessons learned and experiences. The Final Report would also benefit from an annex listing all reports and publications produced by the Project over its lifetime.

366. A Mid-Term Review was undertaken between December 2013 and January 2014. However, there was only a very small budget for the Mid-Term Review (US\$10,000), which allowed few days for the field mission, analysis of data and writing of the evaluation report and must be considered insufficient. The international consultant for the MTR did an excellent job considering the constraints and clearly gave more time to the evaluation than was budgeted. The budget for the Terminal Evaluation (US\$20,000) was supplemented by additional project funds to cover the travel costs of the mission (total budget US\$30,000). In future UNEP, needs to ensure that there are adequate funds for evaluations and that these are checked at the project design stage and ring-fenced so that they cannot be transferred to other budget lines during project implementation.

The M&E plan implementation is rated as Moderately Satisfactory.

3 CONCLUSIONS, RECOMMENDATIONS & LESSONS LEARNED

3.1 Conclusions

367. The Project sought to answer the question whether market-based PES schemes can effectively deliver environmental and socio-economic benefits in forest areas outside of formally protected areas in Western Uganda (and more widely), with particular relevance to improving conservation measures for chimpanzee populations by preserving forest corridors between gazetted forest reserves. To do this it had two main distinct but interlinked components – a PES scheme and a research element that looked to test the scheme’s effectiveness. However, the Project’s focus has been on the research element and this (apparently) is what particularly attracted the GEF funding. This was the first project in the GEF portfolio that involves an experimental randomized design to test whether PES works, hence it was considered highly innovative.

368. The Project’s rationale was that if the PES scheme could demonstrate clear cost-effective ecological, social and economic benefits through provision of statistically robust results, then this would lead to greater adoption of the PES approach (evidence-based decision-making) and thus increased calls and resources for more sustainable forest management practices that would in term reduce the loss of globally significant biodiversity in production landscapes at risk of deforestation (specifically in the Hoima and Kibaale regions but more generally throughout Uganda).

1. How and to what extent did the Project succeed in providing evidence of the effectiveness of payment scheme(s) to a) reduce deforestation and biodiversity loss and b) cover local costs associated with maintaining biodiversity?

369. Analysis of the results to date reveal no statistically significant (at conventional levels) evidence of a reduction in deforestation or increased regeneration, but the analysis has been hampered by low sample size (not enough PFOs signed up to the Project) and the data analysis is not yet fully complete (additional funding allowing full analysis would enable greater confidence in the result). However, trends in the data and other evidence based on the point sample and remote sensing data, self-reported results from the PFOs, feedback from the Community Monitors, and fact that the majority of the PFOs contracted delivered on their contract agreements, all point in the same direction of reduced (or at least delayed) deforestation in the treatment areas compared to that in the control villages, although the extent of the impact of the PES scheme on the level of deforestation has been relatively small.

370. Despite the lack of strong statistical evidence, seen from a policy perspective the results suggest that the PES scheme was worthwhile because it provides income and other social benefits (although, again, most socio-economic gains were also not statistically significant) that incentivize people not to cut down or degrade forest, at least not in the short term or under the current market conditions. In addition, the community monitoring system worked efficiently and the administration of the scheme was successful in arranging payments, which has demonstrated that the scheme was practical and can work at the local level in Western Uganda.

371. However, the payments made through the scheme for delivering on their management plans were not enough to cover opportunity and other costs as reported by the PFOs; in other words the local costs of maintaining biodiversity were not offset by the scheme. Also, the scheme created a number of unforeseen negative impacts, such as an apparent increase in raids on crops by vermin in some villages which led to increased conflict between those who participated in the scheme and those who did not. However, those who stuck to their contracts saw additional value to the scheme, and it seems to have been a combination of the financial payments and other non-monetary benefits, such as clarification of ‘ownership’ of their land, that kept the majority of the PFOs committed for the two years of the scheme. Also the expectation (through widespread promotion) of greater levels of funding from other initiatives in the future,

particularly for carbon payments from an expected national REDD+ programme, almost certainly influenced the take up and commitment of the PFOs.

372. Given the apparently marginal benefits for biodiversity (e.g. in terms of percentage reduction in deforestation or increase in patrolling of forests by PFOs between the treatment and control groups) and the high costs of the scheme (total GEF budget was over US\$2.1 million although a significant amount of this was spent on the research element), there is a question over how cost-effective the PES scheme has been in terms of its value for biodiversity conservation (US\$/unit of reduced deforestation) but also its value compared to alternatives, e.g. establishing public or community managed protected areas from the remaining forests to protect the chimpanzees and forest ecosystems. In addition, the results are probably context specific as several of its features were very specific (e.g. social mix in communities, payment levels) which makes it difficult to compare directly with other PES designs (experience from other parts of the world suggests that each PES scheme usually has unique features), and the PES scheme as designed for this Project would need modification and repiloting if used in other areas of Uganda.

2. To what extent has the Project increased the number of national and community stakeholders who understand the design and implementation of PES scheme using a randomized experimental design?

373. Although not quantified by the Project, judging from TE interviews and project documentation, there has been a notable increase in awareness of the value of ecosystem services and opportunities provided by the PES model among local communities participating in the Project. PFOs interviewed had a good understanding of the advantages and disadvantages of managing their forests and their value in securing ecosystem services. There has also been increased awareness among key local and national government technical staff.

374. In addition, the Project's training programme, although limited, has helped build capacity to design and implement PES schemes among key technical staff at NEMA, District authorities and some of the Project's partner organisations. Importantly, the capacity building efforts directed at the network of Community Monitors (increase in numbers of staff and targeted training) used to support implementation of the Project on the ground has been significant and their efforts have undoubtedly been a key factor in the successful delivery of the scheme.

375. In terms of the research element, however, there has been less capacity building, with no direct training of Ugandan nationals in research design or data analysis (although this was not specifically envisaged at the project design stage) and poor linkage between international researchers and Ugandan academics. Unsurprisingly, perhaps, there has been relatively little interest or discussion in Uganda over how the PES scheme was tested (the merits and limits of using a randomized experimental design involving treatment and control groups); rather the local and national focus has been on the implementation of the scheme itself and the results it has produced.

376. One clear response to the Project's efforts to raise awareness of the opportunities offered by the PES approach and increase knowledge and capacity of the design and implementation of PES schemes at the national level has been the success the Project has had in getting the PES approach mainstreamed into various national policy and planning processes through NEMA, e.g. mention of PES, biodiversity offsets and innovative financial mechanisms for funding biodiversity conservation, within the review of the National Environmental Policy and Act. And at the local level, the high level of commitment by the PFOs to their contracts e.g. increase in patrolling of their land, indicates that they clearly understand benefits from the scheme and are using this new knowledge.

3. Was the Project's focus on research appropriate in terms of helping to deliver GEF and UNEP biodiversity aims and goals? What were the challenges/lessons learned in having a research focus in a GEF biodiversity project?

377. There was a strong rationale for having a project to test whether the PES approach is suitable as a tool to deliver biodiversity gains as GEF has funded a number of PES-focused projects (and continues to do so) but evidence of their effectiveness and identification of their limitations has been generally lacking. However, the Project has demonstrated that answering such questions using a rigorous experimental approach which requires large sample sizes to be effective and allow statistical comparison and working in a field situation in developing countries (where GEF has its focus) is time-consuming, labour-intensive and very expensive, and realistically may be beyond the budgets of GEF, at least the funding provided by a MSP. With hindsight an application should have been made for a FSP, with a budget of at least US\$2 million (with additional co-financing) and run over a longer period (suggested 5 years) to be able to demonstrate changes in key forest biodiversity measures (1-2 years of field data is not considered sufficient to demonstrate successful forest regeneration or changes in populations and distribution of many forest species).

378. Consequently, it is debatable whether research should be the main focus of a GEF Biodiversity project. In the TE's opinion, research can be part of a GEF project, but it should be tied to monitoring and evaluation activities with data provided to researchers who should (rightly) be involved in the design of data collection and its analysis. However, the design and budget of the project should not be driven by research needs. GEF funds should focus on achieving outcomes (changes in status or behaviour) in the GEF Biodiversity Focal Area.

379. The Project also illustrates that those involved in research/academia and designing and implementing practical conservation measures on the ground can have very different perspectives ('mindsets') and expectations of what a project should produce, its priorities and what constitutes success. In the current project, these differences between the two 'camps' within the Project created unnecessary tensions. Any future GEF projects with strong research elements need to ensure that there are mechanisms for consultation, communication and collaboration established early on in project design so that the various groups involved are able to develop a common understanding and agreement on what a project aims to achieve and how it should develop. It is also clear that GEF needs to produce guidelines on how research should be undertaken within its projects to avoid conflicts, e.g. over attribution of results, ownership of data, involvement of national and non-national researchers.

380. Overall, GEF does not have a comparative advantage over the multitude of other donors and grant-giving bodies who have long-established programmes and internal structures and processes for funding research, and GEF would probably achieve more by partnering with them to co-finance projects to answer key research questions rather than establishing itself as yet another body offering research funds.

4. How and to what extent did the Project produce lessons which are applicable to follow up projects and similar initiatives? Is there any evidence of these lessons having been taken up by other projects and initiatives?

381. The Project's results and experiences have fed directly into a number of other initiatives, which has been one of the successes of the Project, and these are likely to lead to significant impact in the future beyond the immediate Project, including the influence on the design of other PES schemes being developed in Uganda (e.g. by WWF, IUCN) and, importantly, the adoption and championing of the PES approach (and promotion of the value of ecosystem services more generally) by the NEMA team who have responsibility for issues relating to national environmental policy in Uganda.

382. The Project's findings have been partly captured in project documents and synthesized into a short set of lessons learned (which largely relate to the PES scheme and its implementation with little on the lessons learned on the research element). There would be considerable value in expanding these, as much useful experience has not been fully reported on, through a larger, wider lesson learning process, the result of which could form a core component of the proposed PES Guidelines currently being considered by NEMA to supplement the revised National Environmental Policy and Act.

5. What are the main challenges to continuation of the PES scheme?

383. Although the Project was successful at setting up and implementing a PES scheme in Western Uganda and does seem to have had some impact in reducing deforestation locally and it successfully engaged local communities in the process, its sustainability, particularly financial, is a major concern. Sustainability has not received the attention it should, partly because of the perception/promotion of the Project as essentially a research project for which sustainability has not been considered important or properly addressed.

384. There is still considerable interest among PFOs within the treatment group in continuing with the scheme, and many members of the control group expressed interest in joining, but there is no follow-up funding for the scheme. However, although many of the PFOs were still implementing the management plans associated with their previous contracts when interviewed at the TE, despite not having not been paid for well over a year, it seems unlikely they will continue indefinitely without some form of payments, as although other benefits are important, e.g. land title, each PFO needs to have an adequate source of income for their family.

385. Private sector involvement has been disappointingly poor. Unfortunately, the anticipated buy-in by the private sector companies that rely on the ecosystem services provided by the forests in the Hoima and Kibaale Districts, such as hydroelectric, tobacco, and drinks companies, and including international companies interested in carbon credits, did not materialise. There seem to have been various reasons for this, including limited identification of opportunities for private sector actors to become involved on the demand side of the PES scheme and a poor understanding of, and linkage, to relevant markets (e.g. analysis of whole market chain from the initial producers all the way through to final buyers of the ecosystem services, including brokers has not been strong). Also, the business case for the PES scheme does not seem to have been clearly made to the private sector. This has not been helped by the perception of limited GoU commitment, evidenced by the failure to deliver much of its co-financing to the Project, or the image of the Project as essentially a research project (with its rather confused and esoteric title) that seeks to test a biodiversity conservation management approach, rather than trying to achieve change directly through its activities or set up as a business.

386. It is clear that the funding approach for the PES scheme needs to be rethought if it is to be re-established. It cannot rely on short-term external grants, and a more sustainable 'multiple PES approach' needs to be considered, with the creation of some form of framework for payments from the private and public sector buyers to ensure the scheme is maintained, and some kind of revolving fund and cooperative arrangement (PFO associations?) to ensure payments can be shared between PFOs who contribute different mixes of ecosystem services. Securing short-term grants of US\$50-100,000 is unpredictable and usually insufficient. Indeed one-off grants were never envisaged as the solution to the sustainability of the PES scheme. Consequently, there needs to be a discussion amongst the main partners on how to make the PES scheme sustainable in the long term and whether this means redesigning the PES scheme approach to ensure that. The GoU also needs to make contributions to maintaining the ecosystem services in these forests, as they are important for the long-term maintenance of the biodiversity and ecological processes of the local forest reserves (which the GoU manages and has direct responsibility for). Judging from the TE interviews a clear GoU (financial) commitment would also encourage the private sector to join.

6. To what extent did the Project succeed in coordinating its work with other GEF and non-GEF initiatives as listed on page 17, paragraph 39 of the project document?

387. Although there are a number of other (extant or completed) GEF and UNEP projects that have focused on ecosystem services and PES schemes, many of which are listed in the ProDoc, there has been very poor linkage with other initiatives. This is especially surprising as UNEP has a specific Unit within its Division of Environmental Policy Implementation (DEPI) that deals with ecosystem services, their valuation and PES schemes (the Ecosystems Services and Economics Unit) and UNEP has a sizeable portfolio of GEF- and non GEF-funded projects working on PES and related themes. Communication, collaboration and

coordination with these initiatives has been weak and UNEP needs to be address this, as it is losing value by not doing so. Indeed, there is a strong argument for UNEP undertaking a joint lesson learning exercise that would extract common lessons and ‘good practices’ from the portfolio and enabling it to develop a more programmatic approach to its ecosystem services work, which at the moment comes across as rather piecemeal and uncoordinated.

388. The overall rating for the Project is **Satisfactory**. A summary of the evaluation criteria, assessment and ratings is given below.

Table 10: Summary of Evaluation criteria, assessment and ratings

Criterion	Summary Assessment	Ref.	Rating
A. Strategic relevance	Project was designed to help answer the question whether PES schemes are effective for delivery of environmental and socio-economic benefits in forest ecosystems in Uganda (and more widely), which is of interest to GEF, other donor agencies, and the wider conservation/development community as rigorous testing of the PES model has been lacking. There is good alignment with Government of Uganda and other national and local stakeholder priorities and interests. Good alignment with UNEP MTS and PoW and complementary with a number of UNEP managed projects.	2.9	HS
B. Achievement of outputs	Most outputs were delivered and delivered well, although analysis of some of the ecological data is still incomplete due to lack of funds.	2.10	S
C. Effectiveness: Attainment of objectives and planned results	The Project has delivered many outputs but assessing progress on achievement of outcomes and higher aims is problematic. Analysis of the research results suggests a small effect on deforestation although not statistically significant (more analysis is needed of spatial data to give a more definitive answer). Qualitative data also supports this conclusion. There were some small socio-economic benefits to the treatment group compared to the control group. However, the Project was able to successfully deliver a PES scheme in the field and there is much interest in continuing it at the local level.	2.11	MS
1. Achievement of direct outcomes as defined in the reconstructed TOC	Good achievement of some of the direct outcomes in the reconstructed ToC, above what was originally expected from the Project (its research focus), although buy-in from the private sector was poor.	2.11.1	S
2. Likelihood of impact using ROtI approach	Feeding of results into national environmental policy making at NEMA has been good, with, for example, PES being included as a sustainable land management option in the revised National Environmental Policy and Act. However, establishment of frameworks and linkages between the providers of ecosystem services in the target area and buyers has been poor.	2.11.2	ML
3. Achievement of formal project objectives as presented in the Project Document.	It is difficult to assess the degree of attainment of the Project objectives due to lack of appropriate indicators, baselines and targets. However, the limited ambition of the Project’s objective - to simply <u>test</u> a PES approach in the context of the forested area of Western Uganda - can be said to have been delivered, although achievement of the Project’s stated purpose - to support the GoU by providing empirical evidence regarding the effectiveness of the PES scheme(s) in order to develop a replication strategy for other areas at risk of deforestation and to attract other buyers to participate – is more debatable.	2.11.3	MS
D. Sustainability and replication			

Criterion	Summary Assessment	Ref.	Rating
1. Socio-political sustainability	The Project has been viewed (and promoted) as essentially a <u>research</u> project and the design and implementation approach focused on a three-year experiment with little clear idea of what was to happen thereafter. However, PFOs clearly see benefits from PES and there is considerable interest in continuation and expansion of scheme locally.	2.12.1	ML
2. Financial resources	No follow-up funding for payments to the PFOs or to employ the Community Monitors was secured during life of Project. The expected financing associated with REDD+ for Uganda has not materialized due in part to delays over REDD+ programme at the international level. Particularly disappointing has been the failure to establish a payment framework with the private sector, and engagement with the business community has been weak and unsuccessful in terms of financing for ecosystem services (although to be fair sustainability of the project was not seen as a priority as it was viewed as a research project by UNEP and others). Some private sector partners did not even contribute their co-financing pledged at project approval stage. Relying on irregular usually one-off (donor) contributions is not a sustainable financing model and the scheme needs a new approach to funding less reliant on donor funds.	2.12.2	MU
3. Institutional framework	The system of locally based Community Monitors has been successful and a key element in delivering the scheme. These have been integrated into the infrastructure and strategic plan of the CSWCT. Capacity (knowledge, training) has also been built at NEMA which will support further mainstreaming of the results at the national level. Other partners are well-established and not reliant on the project for their survival. In addition, the Project was responsible for the creation of a new forum – the Northern Albertine Rift Conservation Group – which has a focus on PES in the Northern Albertine rift.	2.12.3	ML
4. Environmental sustainability	PFOs in treatment groups were supportive of forest conservation and understand well the value of the forests for ecosystem services. However, these PFOs are unlikely to continue with sustainable forest management activities and will instead convert forest to cash crops if further sustainable funding cannot be found in next 1-2 years.	2.12.4	ML
5. Catalytic role and replication	Good catalysis and replication of preliminary results. Project has catalysed uptake and design of PES within other initiatives in Uganda, e.g. WWF project on PES, and also heavily influenced thinking on value and role of ecosystem services in national policy and legislation including revised National Environmental Policy and Act and fed into other national level processes, e.g. revision of NBSAP.	2.12.5	S
E. Efficiency	Although no specific cost- and time-saving measures proposed, the Project principally built on well-established relationships that key partners had with local communities (e.g. CSWCT, IPA), as well as existing baseline (which was further supplemented at the PPG stage and again in first year of operation). These partners with extensive networks and national and, in some cases, global programmes, offered the opportunity to raise awareness and promote the mainstreaming of the Project results.	2.13	S
F. Factors affecting project performance			
1. Preparation and readiness	The Project was largely focused at delivery at the output level (reflecting its research focus), and not at the outcome level or above. Changes in focus from a pure PES scheme to a largely research project caused splits in the Project, and decision to increase number of villages that needed to be involved at first PSC meeting necessitated hugely increased workloads and commitments from partners without	2.14.1	MS

Criterion	Summary Assessment	Ref.	Rating
	compensatory increase in GEF funding (suggesting initial estimate of sample size needed for the Project was miscalculated), which created further tensions. Formulation of outcomes was confused and overlapped. The overall logic of the project was unclear, reflecting the two parts of the project – a PES scheme and research project each with different aims. Unfortunately, there was no independent technical review of the research elements of the project at the design phase. However, it should be recognized that this is the first UNEP-GEF project with a focus on research and consequently mistakes, particularly at the initial design stage, were likely to be made.		
2. Project implementation and management	Management and execution arrangements were generally clear and appropriate, although capacity of, and budget for, the Project Management Unit (within CSWCT) to implement and coordinate such a complicated project was low, given the timeframe and ambitions of the Project. Similarly, the budget for analysis of the research results was insufficient. The PMU was particularly stretched after the decision to increase number of villages to be included in the Project at the first PSC/inception meeting.	2.14.2	S
3. Stakeholders participation, cooperation and partnerships	Good engagement of partners and stakeholders, with very good engagement with local communities aided by the Community Monitors structure. Partnership roles and responsibilities (partners included some of the world's experts in the field of PES and highly experienced researchers) were generally clear with key partnerships governed through MoUs with the executing agency (NEMA), except for the international research group, but no specific partnership strategy developed. Coordination of the significant number of partners and the number of PFOs and communities to be involved proved a challenge and underestimated. There were tensions between some partners, especially over budgets, and two distinct 'camps' formed within the project pushing their own agendas – the PES scheme and research element. However, the partnership did function and the Project was delivered although there was no meaningful collaboration with Ugandan researchers. The identification of private sector partners at national level was rather superficial, although a role was identified for them on both the PSC and TC. Cooperation with other UNEP initiatives involved with PES or ecosystem services was minimal.	2.14.3	MS
4. Communication and public awareness	The Project's communication and public awareness raising activities were considered reasonably effective; certainly the level of knowledge of the PFOs on the value of their forests and opportunities for alternative livelihoods has increased.	2.14.4	S
5. Country ownership and driven-ness	There was mixed national ownership of the Project. Originally, Ugandan interest was in developing a PES scheme in the target area to better protect chimpanzee populations and other forest biodiversity (high national ownership), but the focus was re-orientated to research to test the effectiveness of the PES approach following advice from UNEP and GEF (lower national ownership), at which point international researchers became involved and had a major influence on the direction and budget of the Project. However, the Government of Uganda (NEMA) did approve the Project for GEF funding and the Project has produced policy relevant results which have been of value to national agendas.	2.14.5	MS
6. Financial planning and management	Detailed budget presented in usual form as an appendix in the ProDoc. Costs for establishing the PES scheme and research element represented the majority of the budget with relatively little for capacity building. Budget was revised following decision at first PSC to increase number of villages to be included, which put strains on all partners, especially because significant pledged co-financing from Government	2.14.6	S

Criterion	Summary Assessment	Ref.	Rating
	and private sector did not materialize. This necessitated additional, time-consuming fund-raising, which was only partly successful. In spite of this financial planning and management were well organized and short delays in financial reporting were not significant.		
7. Supervision, guidance and technical backstopping	The project was managed by a TM, based in Nairobi who played an active role. A separate PSC and (more nationally constituted) TC were established, with identified budgets. Although active, the TC did not provide technical scrutiny of the research element of the Project. Linkage with technical support (e.g. on PES) within UNEP was weak and not exploited as much as it could have been.	2.14.7	S
8. Monitoring and evaluation	The project's M&E system followed UNEP's standard monitoring and evaluation procedure, although it suffered from a weak design, e.g. many non-SMART indicators and targets with absent baseline data. Reporting requirements were largely fulfilled throughout the Project.	2.14.8	MS
i. M&E design	The logframe has weaknesses, e.g. it focuses on activities and outputs (both with their own sets of indicators, which makes monitoring and reporting more time-consuming and complex) with many indicators that are not fully SMART and largely set at output level. Baseline information was largely qualitative at design stage or incomplete.	2.14.8	MS
ii. M&E plan implementation	Monitoring of project progress has been good as most indicators are at output level and easily tracked, but monitoring of performance (in terms of achievement of project outcomes and project objective) was poor due to inadequate indicators. Reporting requirements were largely fulfilled throughout the Project. There was reasonable budget for M&E, and both MTR and TE were undertaken but the budget for MTR was completely inadequate.	2.14.8	S
Overall project rating	Satisfactory		

3.2 Recommendations and Lessons

389. The main recommendations and lessons learned generated from the evaluation findings have been specified in the main body of the report are presented in the Executive Summary.

UNEP Evaluation Quality Assessment

Evaluation Title:

Evaluation of the Project: Developing an Experimental Methodology for Testing the Effectiveness of Payment for Ecosystem Services to Enhance Conservation in Production Landscapes in Uganda

All UNEP evaluations are subject to a quality assessment by the Evaluation Office. The quality assessment is used as a tool for providing structured feedback to the evaluation consultants.

The quality of both the draft and final evaluation report is assessed and rated against the following criteria:

	UNEP Evaluation Office Comments	Draft Report Rating	Final Report Rating
Substantive report quality criteria			
A. Quality of the Executive Summary: Does the executive summary present the main findings of the report for each evaluation criterion and a good summary of recommendations and lessons learned? (Executive Summary not required for zero draft)	Final report: Good summary presenting key points		5
B. Project context and project description: Does the report present an up-to-date description of the socio-economic, political, institutional and environmental context of the project, including the issues that the project is trying to address, their root causes and consequences on the environment and human well-being? Are any changes since the time of project design highlighted? Is all essential information about the project clearly presented in the report (objectives, target groups, institutional arrangements, budget, changes in design since approval etc.)?	Draft report: Good overview, changes described and precise presentation of key points. Final report: Same	5	5
C. Strategic relevance: Does the report present a well-reasoned, complete and evidence-based assessment of strategic relevance of the intervention in terms of relevance of the project to global, regional and national environmental issues and needs, and UNEP strategies and programmes?	Draft report: Very good and detailed analysis Final report: Same	5	5
D. Achievement of outputs: Does the report present a well-reasoned, complete and evidence-based assessment of outputs delivered by the intervention (including their quality)?	Draft report: Detailed assessment Final report: Same	5	5

E.	Presentation of Theory of Change: Is the Theory of Change of the intervention clearly presented? Are causal pathways logical and complete (including drivers, assumptions and key actors)?	Draft report: ToC reconstruction of very good quality, triggering good discussion with EM about key steps Final report: Same	6	6
F.	Effectiveness - Attainment of project objectives and results: Does the report present a well-reasoned, complete and evidence-based assessment of the achievement of the relevant outcomes and project objectives?	Draft report: Yes, good assessment Final report: Same	5	5
G.	Sustainability and replication: Does the report present a well-reasoned and evidence-based assessment of sustainability of outcomes and replication / catalytic effects?	Draft report: Yes all dimensions considered Final report: Same	5	5
H.	Efficiency: Does the report present a well-reasoned, complete and evidence-based assessment of efficiency? Does the report present any comparison with similar interventions?	Draft report: Yes, but no comparisons Final report: Same	5	5
I.	Factors affecting project performance: Does the report present a well-reasoned, complete and evidence-based assessment of all factors affecting project performance? In particular, does the report include the actual project costs (total and per activity) and actual co-financing used; and an assessment of the quality of the project M&E system and its use for project management?	Draft report: Good analysis Final report: Same	5	5
J.	Quality of the conclusions: Do the conclusions highlight the main strengths and weaknesses of the project, and connect those in a compelling story line?	Draft report: Conclusions highlight key points Final report: Same	5	5
K.	Quality and utility of the recommendations: Are recommendations based on explicit evaluation findings? Do recommendations specify the actions necessary to correct existing conditions or improve operations ('who?' 'what?' 'where?' 'when?'). Can they be implemented?	Draft report: R are targeted and useful, need to refine them based on feedback from stakeholders, some may not be actionable Final report: R refined	5	5
L.	Quality and utility of the lessons: Are lessons based on explicit evaluation	Draft report: Lessons are useful and covered a broad	6	6

findings? Do they suggest prescriptive action? Do they specify in which contexts they are applicable?	range of issues of relevance to the various partners Final report: Same		
Report structure quality criteria			
M. Structure and clarity of the report: Does the report structure follow EO guidelines? Are all requested Annexes included?	Draft report: Very good structure, but also very long Final report: Same, cross referring makes the report a bit lighter	5	5
N. Evaluation methods and information sources: Are evaluation methods and information sources clearly described? Are data collection methods, the triangulation / verification approach, details of stakeholder consultations provided? Are the limitations of evaluation methods and information sources described?	Draft report: Yes good description Final report: Same	5	5
O. Quality of writing: Was the report well written? (clear English language and grammar)	Draft report: Good writing style, could increase cross-referencing Final report: Cross referencing increased in final draft	5	6
P. Report formatting: Does the report follow EO guidelines using headings, numbered paragraphs etc.	Draft report: Good formatting for draft stage Final report: Good formatting	5	5
OVERALL REPORT QUALITY RATING		5.1	5.3

The quality of the evaluation process is assessed at the end of the evaluation and rated against the following criteria:

	UNEP Evaluation Office Comments		Rating
Evaluation process quality criteria			
Q. Preparation: Was the evaluation budget agreed and approved by the EO? Was inception report delivered and approved prior to commencing any travel?	Yes		6
R. Timeliness: Was a TE initiated within the period of six months before or after project completion? Was an MTE initiated within a six month period prior to the project's mid-point? Were all deadlines set in the ToR respected?	Yes, delays due to health situation of the consultant and long period required for comments from stakeholders and TM		4
S. Project's support: Did the project make available all required documents? Was adequate support provided to the evaluator(s) in planning and conducting evaluation missions?	Yes		5
T. Recommendations: Was an	Yes		5

implementation plan for the evaluation recommendations prepared? Was the implementation plan adequately communicated to the project?			
U. Quality assurance: Was the evaluation peer-reviewed? Was the quality of the draft report checked by the evaluation manager and peer reviewer prior to dissemination to stakeholders for comments? Did EO complete an assessment of the quality of the final report?	Yes		5
V. Transparency: Were the draft ToR and evaluation report circulated to all key stakeholders for comments? Was the draft evaluation report sent directly to EO? Were all comments to the draft evaluation report sent directly to the EO and did EO share all comments with the commentators? Did the evaluator(s) prepare a response to all comments?	Yes		5
W. Participatory approach: Was close communication to the EO and project maintained throughout the evaluation? Were evaluation findings, lessons and recommendations adequately communicated?	Yes, very in depth discussion with stakeholders on lessons and recommendations		6
X. Independence: Was the final selection of the evaluator(s) made by EO? Were possible conflicts of interest of the selected evaluator(s) appraised?	Yes		6
OVERALL PROCESS RATING: 5.75			

Rating system for quality of evaluation reports

A number rating 1-6 is used for each criterion: Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, Highly Unsatisfactory = 1

The overall quality of the evaluation report is calculated by taking the mean score of all rated quality criteria.

4 ANNEXES

1. Evaluation TORs (without annexes)
2. Schedule of Project activities
3. Response to stakeholder comments received but not (fully) accepted by the evaluators
4. Evaluation program, containing the names of locations visited and the names (or functions) and contacts (Email) of people met
5. Bibliography
6. Brief CVs of the consultant
7. Perceived successes and failures, strengths and weaknesses of project reported by interviewees
8. List of publications produced and presentations given by the Project
9. Notes on how the PES payment level was calculated

TERMS OF REFERENCE FOR THE EVALUATION

Terminal Evaluation of the UNEP/GEF Project “Developing an Experimental Methodology for Testing the Effectiveness of Payment for Ecosystem Services to Enhance Conservation in Production Landscapes in Uganda”

TERMS OF REFERENCE⁹⁰

Terminal Evaluation of the UNEP/GEF project

“Developing an Experimental Methodology for Testing the Effectiveness of Payment for Ecosystem Services to Enhance Conservation in Production Landscapes in Uganda”

5 PROJECT BACKGROUND AND OVERVIEW

5.1 Project General Information

Table 1. Project summary

GEF project ID:	3682	IMIS number:	GFL: 2328-2716
Focal Area(s):	BD2 To mainstream biodiversity in Production Landscapes SP 5 Fostering Markets for Biodiversity Goods and Services	GEF OP #:	
GEF Strategic Priority/Objective:	Fostering markets for biodiversity goods and services	GEF approval date:	1 February 2010
UNEP approval date:	10 May 2010	First Disbursement:	25 May 2010
Actual start date:	1 June 2010	Planned duration:	54 months
Intended completion date:	30 April 2014	Actual or Expected completion date:	31 October 2014
Project Type:	MSP	GEF Allocation:	\$870,000
PPG GEF cost:	\$30,000	PDF co-financing*:	\$478,222
Expected MSP Co-	\$1,232,400	Total Cost:	\$2,102,400

⁹⁰ TOR version of March 2015

financing:			
Mid-term review/eval. (planned date):	August 2012	Terminal Evaluation (actual date):	April 2015
Mid-term review/eval. (actual date):	January 2013	No. of revisions:	1
Date of last Steering Committee meeting:	21-24 October 2014	Date of last Revision:	11 October 2013
Disbursement as of 30 June 2013:	\$803,107.13	Date of financial closure:	31 December 2014
Date of Completion:	3 May 2014	Actual expenditures reported as of 31 December 2014:	\$ 820,965
Total co-financing realized as 30 June 2013	\$612,710	Actual expenditures entered in IMIS as 31 December 2014:	\$ 625,380.38
Leveraged financing:	\$762,232		

5.2 Project rationale

1. Uganda is exceptionally important in terms of biodiversity. Although the country covers just 241,551 km² and accounts for only 0.18% of the world's terrestrial and freshwater surface, Uganda harbours 4.6% of the dragonflies, 6.8% of the butterflies, 7.5% of the mammals, and 10.2% of the bird species globally recognized. Uganda has more species of primates than anywhere else on Earth of similar area.
2. Uganda's economic and social development is dependent on its rich biodiversity and natural resources, with more than 90% of the population directly dependent on natural resources for their livelihood and income. Despite the value of Uganda's natural resources to its economy, the environment is severely strained. For example, the deforestation rate is estimated to be 55,000 ha per year.
3. Uganda is one of the African countries that have been discussing the involvement of the private sector in biodiversity conservation. It was anticipated that for the results of this project to be replicated and sustained, businesses and the private sector in Uganda and internationally would have to buy into this model so that they would participate as "buyers" of the ecosystem services.
4. The project aimed to use a payment scheme to create incentives for local communities to conserve and restore forest habitats important for chimpanzees and biodiversity in general and, in this way, deliver environmental and social benefits. The payment scheme was meant to be designed and implemented in accordance with internationally recognized standards of best practice, in particular the Climate, Community and Biodiversity Alliance (CCBS) standards. This project intended to go further in providing assurance of delivery of additional environmental and social benefits by incorporating an experimental design which would allow comparison over time with a control group. The project aimed at developing an experimental methodology for testing the effectiveness of PES as a viable means for financing and procuring biodiversity conservation outside protected areas using an experimental methodology, focusing on private and communal forests in Hoima and Kibaale districts between Budongo, Bugoma, Rwengeye, Kyamurangi, Kasato and Kijuna Central Forest Reserves (CFRs). Clearing of forests for cash crops such as tobacco and rice in this area was threatening the survival of these forests and their attendant wildlife, including chimpanzees. The loss of these forest habitats was also threatening ecosystem services, in particular carbon storage and access to clean water.

5. This project intended to liaise with and build on gains from several initiatives in Uganda that are working towards sustainable development. These included; (a) market Access for Organic Products; (b) several projects related to carbon sequestration and finance involving the World Bank, the Environmental Conservation Trust of Uganda (ECOTRUST), the Uganda Wildlife Authority (UWA), FACE Forest Certification and other institutions; (c) the “Rwoho Forest Conservation Project” which intended to provide seeds for agro-forestry and bee hives in exchange for sustainable forest resource use; (d) the “Mabira Forest Reserve Project” in which the National Forest Authority (NFA) and local communities would share revenue generated from eco-tourism; (e) collaborative forest management activities in Kibale and Mt Elgon National Parks; (f) World Wide Fund for Nature (WWF) project through Wildlife Conservation Society (WCS) in a United Nations Development Programme – Global Environment Facility (UNDPGEF) project in the Albertine Rift region which was to assess potential sustainable financing mechanisms including Reducing Emissions from Deforestation and Degradation (REDD) to support protection of the northern corridor; and (g) UNDP’s global project: “Institutionalizing Payments for Ecosystem Services,” executed by Forest Trends.

5.3 Project objectives and components

6. The project **objective** was to test the effectiveness of PES as a viable means for financing and procuring biodiversity conservation outside protected areas in Uganda using an experimental methodology.
7. The overall **goal** of the Project was the enhancement of Biodiversity Conservation in Production Landscapes in Uganda and globally through better understanding of Payment for Ecosystem Services.
8. The project **purpose** was to support the government of Uganda (GoU) in creating empirical evidence regarding the effectiveness of the PES scheme(s) in order to develop a replication strategy in other areas at risk of deforestation and to attract other buyers to participate.
9. The structure of this project comprised four components: Piloting of PES scheme(s) based on experimental methodology (Component 1); Updating local institutions’ scientific and monitoring programs and strengthening capacity for PES (Component 2); Generating, disseminating, and replicating good practices (Component 3); Project Management (Component 4).

Component 1

10. The main purpose of Component 1 was the running of a PES Scheme. The intended outcome of this component was a statistically valid field methodology that can be used to demonstrate the effectiveness of payment scheme(s) to (a) reduce deforestation and biodiversity loss and (b) deliver social benefits at a minimum costs associated with maintaining biodiversity.

Component 2

11. This component aimed to train local resource users in the application of land-uses to maximize biodiversity maintenance. In addition, monitoring schemes were to be established and national partners trained to oversee the maintenance of biodiversity and payment compliance. Training on PES for Decision- makers and technical staff in government, universities, and Non-Governmental Organizations (NGOs) was planned, including on methods of valuation, as well as conditionalities of different payment schemes.
12. The main outcome was intended to be an increased number of national and community Stakeholders —from diverse sectors and from strategically placed institutions —who can design and implement PES schemes.

Component 3:

13. This component aimed to identify good practices and lessons learnt from this project through a rigorous monitoring and evaluation strategy. It also intended to identify sites for possible replication and options to disseminate the lessons and results of the project.

Component 4:

14. This component aimed to provide the project with a solid management structure. Details of the executing arrangements can be found in section 4 of these ToRs.

Table 2 summarizes the project components, their objectives and the expected outputs.

Table 2. Project objectives, expected outcomes and outputs

Components	Outcome(s)	Output(s)
Piloting of PES scheme(s) using a randomized design and other experimental methodologies	Evidence of effectiveness of payment scheme(s) to a) reduce deforestation and biodiversity loss and b) cover local costs associated with maintaining biodiversity	A pilot PES scheme designed and implemented
Strengthening technical and institutional capacity to design, implement and monitor PES schemes	An increased number of national and community stakeholders understand the design and implementation of PES scheme using a randomized experimental design	<ol style="list-style-type: none"> 1. Local resource users trained in the application of land uses to maximize Biodiversity maintenance 2. Monitoring schemes established and national partners trained to oversee the maintenance of biodiversity and payment compliance
Generating, developing and disseminating a replicable PES model (s) based on lessons learned and best practices	Project lessons in using PES to deliver multiple benefits including global benefits communicated nationally and internationally for wider replication	<ol style="list-style-type: none"> 1. Results of the PES scheme tested statistically to show whether it works or not in the project area 2. All project reports/ written articles completed on time 3. Identify possible sites for replication of most effective payment scheme(s) 4. Synthesis and publication of project results in leading peer reviewed journals 5. Presentation of project results at key regional and global forums

Source: Project document

5.4 Executing Arrangements

15. The **Implementing Agency** for the project was the United Nations Environment Programme (UNEP). In this capacity, UNEP had overall responsibility for the implementation of the project, project oversight, and coordination with other GEF projects.
16. The NEMA (National Environment Management Authority) is the government **executing agency**. It is a semi-autonomous institution that was established by an Act of parliament in May 1995 and is specifically mandated by the National Environment Act (NEA) as the principal agency in Uganda charged with the responsibility of coordinating, monitoring, supervising and regulating all environmental management matters in the country is the project proponent and main Executing Agency.
17. Due to its activities in the project areas and its interest to protect the Chimpanzees in particular, the CSWCT (Chimpanzee Sanctuary & Wildlife Conservation Trust) was selected by NEMA as the main local contractor to assist NEMA in executing the project. The IIED (International Institute for Environment and Development) was involved with the project idea from the beginning and planned to be a co-executing agency guiding the design and implementation of the PES, advising on supply side activities in particular defining and agreeing with landowners the land management activities that will be paid for, address the demand side activities to promote the scheme to potential national and international buyers and establishment of an appropriate institutional framework to manage the scheme.
18. IPA (Innovations for Poverty Action), in collaboration with UQAM (University of Quebec at Montreal Canada) and NAHI (Nature Harness Initiatives), was intended to lead the *ex-post* evaluation comparing the environmental and social changes after payments have started in the treatment group and the control group. The CSWCT has offices in Hoima district and was found suitable to implement the payment of the scheme, while the Katoomba Group has expertise in training for PES and participated as the main trainers.
19. A **Project Management Unit** (PMU) was established within CSWCT to administrate the project. The PMU was responsible for the day to day coordination of project activities, and was required to draft the project's annual work plan and annual budget, coordinate project implementation with key partners, keep records and files in order. The PMU was to consist of a Project Manager with coordination and management skills as well as expertise in biodiversity and forestry issues.
20. The project was to be guided by a **Technical committee** composed of representatives from the various pertinent thematic sectors, private sector, NGOs and key project partners, including the Ministry of the Environment. Additional stakeholders such as UNEP, IIED and international scientists were to participate in annual PSC (**Project Steering Committee**) meetings with a view towards providing overall guidance and steering the implementation of the project. Buyers were also to be invited to join the PSC.

5.5 Project Cost and Financing

The GEF provided 42% of the external financing to the project (USD 900,873). This put the project in the Middle-size Project (MSP) category. The project was expected to mobilize another USD 1,232,400 in co-financing from a number of partners. The estimated project costs at design stage and associated funding sources are presented in Table 3.

Table 3. Estimated project cost

Cost item	Organisation	USD	%
GEF contribution		900000	42.2
Co-financing in cash		1232400	57.8
	NEMA	320000	26
	Hydromax Limited	80000	6.5
	NAHI	50000	4.0
	UCU/UQAM	8400	0.7

	IIED	300000	24.4
Sub-total		758400	
Co-financing in-kind	Katoomba group	150000	12.1
	NEMA	180000	14.6
	CSWCT	100000	8.1
	NAHI	20000	1.6
	UCU/UQAM	24000	1.9
Sub-total		474000	
Total co-financing		1232400	
Total		2132400	

Source: project document

5.6 Implementation Issues

21. The Mid Term Review (MTR) was originally scheduled for August 2012 and it was carried out in January 2013. The MTR concluded that the experimental design was expected to provide conclusive evidence for the adoption of the PES scheme by end of the project (providing the project could adequately document issues of contamination and leakage). For the GEF, the project was considered likely to provide the critical answer as to whether the design was effective and additional information on whether the scheme itself was effective. In relation to the project objective, the main conclusion of the MTR was that the randomised design and experimental methodology developed with the help of international expertise is appropriate to the Ugandan environment and is likely to provide globally important information on the design of PES schemes.
20. The MTR noted that there was some genuine commitment (e.g. in planting out of seedlings that the PFO cannot afford to buy) but there was poor maintenance of the reforestation areas as this appeared to be less of a priority than tending cash crops. Although there are penalties associated with this, many PFOs did not seem to take required forest management actions very seriously and there was a general feeling that incentives provided by the PES scheme are “free money”. Commitment was also evident when the issue of vermin is considered: financial losses due to vermin can far outweigh the incentives provided by the project for keeping the forest (many PFOs cited vermin control as a main reason for cutting down their forests). The MTR also noted that non-beneficiaries close to the control groups were disproportionately impacted by the project in terms of losses due to vermin and increased collecting of forest products from their land. The MTR therefore concluded that there was a growing potential for social conflict.
22. The two main areas of concern highlighted by the MTR are sustainability and impact. The main recommendations of the MTR included the early development of an exit strategy to determine both how the project would continue to operate beyond August 2013 (when the second round of payments were scheduled to be made), how the results would be uploaded and replicated through government, the clarification of the legal and institution framework for PES, addressing the in-migration issue, establishing a technical sub-group to look at issues of cost effectiveness (costing of vermin and leakage impacts), and the development of measures to integrate in-coming livelihoods development initiatives associated with PES and REDD+ with the government NAADS (National Agricultural Advisory Services) programme. In particular, it was expected that the development of a REDD+ project would meet some of the existing expectations and it is therefore important to assess the extent to which this was possible.
23. According to the final report, one noticeable challenge is the delay of ecosystem service buyers to make commitment for payments. Financial commitment was not secured despite several attempts made through the submission of concept notes. The evaluation should therefore make recommendations on how this could be addressed in future projects, including an upcoming REDD+ project.

6 TERMS OF REFERENCE FOR THE EVALUATION

a. Objective and Scope of the Evaluation

24. In line with the UNEP Evaluation Policy⁹¹, the UNEP Evaluation Manual⁹² and the Guidelines for GEF Agencies in Conducting Terminal Evaluations⁹³, the Terminal Evaluation of the Project “Developing an Experimental Methodology for Testing the Effectiveness of Payment for Ecosystem Services to Enhance Conservation in Production Landscapes in Uganda” will be undertaken upon completion of the project to assess project performance (in terms of relevance, effectiveness and efficiency), and determine outcomes and impacts (actual and potential) stemming from the project, including their sustainability. The evaluation has two primary purposes: (i) to provide evidence of results to meet accountability requirements, and (ii) to promote learning, feedback, and knowledge sharing through results and lessons learned among UNEP, the GEF and their executing partners – NEMA and the national partners in particular. Therefore, the evaluation will identify lessons of operational relevance for future project formulation and implementation. It will focus on the following sets of **key questions**, based on the project’s expected outcomes, which may be expanded by the consultants as deemed appropriate:
- How and to what extent did the project succeed in providing evidence of effectiveness of payment scheme(s) to a) reduce deforestation and biodiversity loss and b) cover local costs associated with maintaining biodiversity?
 - To what extent has the project increased the number of national and community stakeholders understanding the design and implementation of PES scheme using a randomized experimental design?
 - How and to what extent did the project produce lessons which are applicable to follow up projects and similar initiatives? Is there evidence of these lessons being taken up by other projects and initiatives?
 - To what extent did the project succeed in coordinating its work with other GEF and non GEF initiatives as listed on page 17, paragraph 39 of the project document?

b. Overall Approach and Methods

25. The Terminal Evaluation of the Project “Developing an Experimental Methodology for Testing the Effectiveness of Payment for Ecosystem Services to Enhance Conservation in Production Landscapes in Uganda” will be conducted by an independent consultant under the overall responsibility and management of the UNEP Evaluation Office (Nairobi), in consultation with the UNEP Task Manager (Nairobi), and the UNEP Fund Management Officer at UNEP/DEPI (Nairobi).

26. It will be an in-depth evaluation using a participatory approach whereby key stakeholders are kept informed and consulted throughout the evaluation process. Both quantitative and qualitative evaluation methods will be used to determine project achievements against the expected outputs, outcomes and impacts.

27. The findings of the evaluation will be based on the following:

- A **desk review** of project documents and others including, but not limited to:
 - Relevant background documentation, inter alia UNEP and GEF-4 policies, strategies and programmes pertaining to biosafety at the time of the project’s approval;
 - Project design documents; Annual Work Plans and Budgets or equivalent, revisions to the logical framework and project financing;
 - Project reports such as progress and financial reports from the executing partners to the Project Management Unit (PMU) and from the PMU to UNEP; National Coordination Committee meeting minutes; annual Project Implementation Reviews and relevant correspondence;
 - Documentation related to project outputs;
 - Relevant material published, e.g. in journals and books
 - Relevant material available online, e.g. project related information on project partners’ websites.

⁹¹ <http://www.unep.org/eou/StandardsPolicyandPractices/UNEPEvaluationPolicy/tabid/3050/language/en-US/Default.aspx>

⁹² <http://www.unep.org/eou/StandardsPolicyandPractices/UNEPEvaluationManual/tabid/2314/language/en-US/Default.aspx>

⁹³ http://www.thegef.org/gef/sites/thegef.org/files/documents/TE_guidelines7-31.pdf

- (b) **Interviews with:**
- UNEP Task Manager and Fund Management Officer and other relevant staff in UNEP related activities as necessary;
 - Interviews with project management, Executing Agency and key partners, including IIED, CSWCT and NAHI to the extent possible;
 - Stakeholders involved with this project, including Private Forest Owners (PFOs) participating in the scheme and those part of the control groups, potential buyers, NGOs, other relevant private sector actors, academia, national organizations and institutes, regional and international organizations and civil society representatives, including rural communities to the extent possible;
 - Relevant staff of GEF Secretariat and
 - Representatives of the government and other organisations (if deemed necessary by the consultant).
- (c) **Country visits.** The evaluation consultant will, if possible, visit the project management team and the UNEP Evaluation Office in Nairobi, after which the consultant will visit the project sites. The evaluation consultant will schedule a visit to Hoima and northern Kibaale districts in western Uganda to interview staff of the PMU, members of the project Technical Steering Committee, other involved district and sub-county political and technical staff, Community-based Monitors (the PES project staff working directly with the communities), and PFOs from treatment and control villages (the villages selected or not selected to participate in the PES scheme).

c. Key Evaluation principles

28. Evaluation findings and judgements should be based on **sound evidence and analysis**, clearly documented in the evaluation report. Information will be triangulated (i.e. verified from different sources) to the extent possible, and when verification was not possible, the single source will be mentioned. Analysis leading to evaluative judgements should always be clearly spelled out.
29. The evaluation will assess the project with respect to **a minimum set of evaluation criteria** grouped in six categories: (1) Strategic Relevance; (2) Attainment of objectives and planned result, which comprises the assessment of outputs achieved, effectiveness and likelihood of impact; (3) Sustainability and replication; (4) Efficiency; (5) Factors and processes affecting project performance, including preparation and readiness, implementation and management, stakeholder participation and public awareness, country ownership and driven-ness, financial planning and management, UNEP supervision and backstopping, and project monitoring and evaluation; and (6) Complementarity with the UNEP strategies and programmes. The evaluation consultants can propose other evaluation criteria as deemed appropriate.
30. **Ratings.** All evaluation criteria will be rated on a six-point scale. However, complementarity of the project with the UNEP strategies and programmes is not rated. Annex 3 provides detailed guidance on how the different criteria should be rated and how ratings should be aggregated for the different evaluation criterion categories.
31. In attempting to attribute any outcomes and impacts to the project, the evaluators should consider the difference between *what has happened with and what would have happened without the project*. This implies that there should be consideration of the baseline conditions and trends in relation to the intended project outcomes and impacts. This also means that there should be plausible evidence to attribute such outcomes and impacts to the actions of the project. Sometimes, adequate information on baseline conditions and trends is lacking. In such cases this should be clearly highlighted by the evaluators, along with any simplifying assumptions that were taken to enable the evaluator to make informed judgements about project performance.
32. As this is a terminal evaluation, particular attention should be given to learning from the experience. Therefore, the “*Why?*” question should be at front of the consultants’ minds all through the evaluation exercise. This means that the consultants needs to go beyond the assessment of “*what*” the project performance was, and make a serious effort to provide a deeper understanding of “*why*” the performance was as it was, i.e. of processes affecting attainment of project results (criteria under category 3). This should provide the basis for the lessons that can be drawn from the project. In fact, the usefulness of the evaluation will be determined to a large extent by the capacity of the consultants to explain “*why things happened*” as they happened and are likely to evolve in this or that direction, which goes well beyond the mere review of “*where things stand*” today.

d. Evaluation criteria

7 Strategic relevance

33. The evaluation will assess, in retrospect, whether the project's objectives and implementation strategies were consistent with: i) Sub-regional environmental issues and needs; ii) the UNEP mandate and policies at the time of design and implementation; and iii) the GEF Biodiversity focal area, strategic priorities and operational programme(s).
34. The evaluation will also assess whether the project objectives were realistic, given the time and budget allocated to the project, the baseline situation and the institutional context in which the project was to operate. It was already noted during the MTE that the budget appeared limited for the scale of activities proposed.

8 Achievement of Outputs

35. The evaluation will assess, for each component, the project's success in producing the programmed results as presented in Table 2 above, both in quantity and quality, as well as their usefulness and timeliness. Briefly explain the degree of success of the project in achieving its different outputs, cross-referencing as needed to more detailed explanations provided under Section F (which covers the processes affecting attainment of project objectives). The achievements under the regional and national demonstration projects will receive particular attention. While evaluating achievement of outputs and activities, the evaluation will consider;
 - Assessment of the project's success in producing each of the programmed outputs, both in quantity and quality as well as usefulness and timeliness.
 - Assess the soundness and effectiveness of the methodologies used for developing the technical documents and related management options in the participating country
 - Assess to what extent the project outputs produced have the weight of scientific authority / credibility, necessary to influence policy and decision-makers, particularly at the national level.

9 Effectiveness: Attainment of Objectives and Planned Results

36. The evaluation will assess the extent to which the project's objectives were effectively achieved or are expected to be achieved.
37. The evaluation will reconstruct the Theory of Change (ToC) of the project based on a review of project documentation and stakeholder interviews. The ToC of a project depicts the causal pathways from project outputs (goods and services delivered by the project) over outcomes (changes resulting from the use made by key stakeholders of project outputs) towards impact (changes in environmental benefits and living conditions). The ToC will also depict any intermediate changes required between project outcomes and impact, called intermediate states. The ToC further defines the external factors that influence change along the pathways, whether one result can lead to the next. These external factors are either drivers (when the project has a certain level of control) or assumptions (when the project has no control).
38. The assessment of effectiveness will be structured in three sub-sections:
 - (a) Evaluation of the **achievement of direct outcomes as defined in the reconstructed ToC**. These are the first-level outcomes expected to be achieved as an immediate result of project outputs.
 - (b) Assessment of the **likelihood of impact** using a *Review of Outcomes to Impacts* (ROtI) approach as summarized in Annex 8 of the TORs. Appreciate to what extent the project has to date contributed, and is likely in the future to further contribute to changes in stakeholder behaviour as a result of the project's direct outcomes, and the likelihood of those changes in turn leading to changes in the natural resource base, benefits derived from the environment and human living conditions.
 - (c) Evaluation of the **achievement of the formal project overall objective, overall purpose, goals and component outcomes** using the project's own results statements as presented in original logframe and any later versions of the logframe. This sub-section will refer back where applicable to sub-sections (a) and (b) to avoid repetition in the report. To measure achievement, the evaluation will use as much as appropriate the indicators for achievement proposed in the Logical Framework Matrix (Logframe) of the project, adding other relevant indicators as appropriate. Briefly explain what factors affected the

project's success in achieving its objectives, cross-referencing as needed to more detailed explanations provided under Section F.

10 Sustainability and replication

39. **Sustainability** is understood as the probability of continued long-term project-derived results and impacts after the external project funding and assistance ends. The evaluation will identify and assess the key conditions or factors that are likely to undermine or contribute to the persistence of benefits. Some of these factors might be direct results of the project while others will include contextual circumstances or developments that are not under control of the project but that may condition sustainability of benefits. The evaluation should ascertain to what extent follow-up work has been initiated and how project results will be sustained and enhanced over time, including through follow up projects. The reconstructed ToC will assist in the evaluation of sustainability.
40. Four aspects of sustainability will be addressed:
- a) *Socio-political sustainability.* Are there any social or political factors that may influence positively or negatively the sustenance of project results and progress towards impacts? Is the level of ownership by the main national and regional stakeholders sufficient to allow for the project results to be sustained? Are there sufficient government and stakeholder awareness, interests, commitment and incentives to execute, enforce and pursue the programmes, plans, agreements, monitoring systems etc. prepared and agreed upon under the project? To what extent was the project able to reach out to the stakeholders identified in the design phase (academia, private sector, PFOs, civil society, etc)? To what extent is the integration of communal benefits or other measures necessary to ensure the sustainability of results and avoid any potential social conflicts?
 - b) *Financial resources.* To what extent are the continuation of project results and the eventual impact of the project dependent on continued financial support? What is the likelihood that adequate financial resources⁹⁴ will be or will become available to implement the programmes, plans, agreements, monitoring systems etc. prepared and agreed upon under the project, especially considering the lower than expected mobilisation rate of buyers? Are there any financial risks that may jeopardize sustenance of project results and onward progress towards impact?
 - c) *Institutional framework.* To what extent is the sustenance of the results and onward progress towards impact dependent on issues relating to institutional frameworks and governance? How robust are the institutional achievements such as governance structures and processes, policies, sub-regional agreements, legal and accountability frameworks etc. required to sustaining project results and to lead those to impact on human behaviour and environmental resources?
 - d) *Environmental sustainability.* Are there any environmental factors, positive or negative, that can influence the future flow of project benefits? Are there any project outputs or higher level results that are likely to affect the environment, which, in turn, might affect sustainability of project benefits? Are there any foreseeable negative environmental impacts, including displacement of negative impacts to non-treatment groups and related forests, that may occur as the project results are being up-scaled?
41. **Catalytic role and replication.** The *catalytic role* of GEF-funded interventions is embodied in their approach of supporting the creation of an enabling environment and of investing in pilot activities which are innovative and showing how new approaches can work. UNEP and the GEF also aim to support activities that upscale new approaches to a national, regional or global level, with a view to achieve sustainable global environmental benefits. The evaluation will assess the catalytic role played by this project, namely to what extent the project has:
- (a) *catalyzed behavioural changes* in terms of use and application by the relevant stakeholders of: i) technologies and approaches show-cased by the demonstration projects; ii) strategic programmes and plans developed; and iii) assessment, monitoring and management systems established at national and regional level;
 - (b) provided *incentives* (social, economic, market based, competencies etc.) to contribute to catalyzing changes in stakeholder behaviour;

⁹⁴ Those resources can be from multiple sources, such as the public and private sectors, income generating activities, other development projects etc.

- (c) contributed to *institutional changes*. An important aspect of the catalytic role of the project is its contribution to institutional uptake or mainstreaming of project-piloted approaches in the regional and national demonstration projects;
 - (d) contributed to *policy changes* (on paper and in implementation of policy);
 - (e) contributed to sustained follow-on financing (*catalytic financing*) from Governments, the GEF or other donors;
 - (f) created opportunities for particular individuals or institutions ("*champions*") to catalyze change (without which the project would not have achieved all of its results).
42. *Replication*, in the context of GEF projects, is defined as lessons and experiences coming out of the project that are replicated (experiences are repeated and lessons applied in different geographic areas) or scaled up (experiences are repeated and lessons applied in the same geographic area but on a much larger scale and funded by other sources). The evaluation will assess the approach adopted by the project to promote replication effects and appreciate to what extent actual replication has already occurred or is likely to occur in the near future. What are the factors that may influence replication and scaling up of project experiences and lessons? To what extent is the evaluation of results "Testing the effectiveness of Payment for Ecosystem Services to Enhance Conservation in productive Landscapes in Uganda" being used in other contexts?

11 Efficiency

43. The evaluation will assess the cost-effectiveness and timeliness of project execution. It will describe any cost- or time-saving measures put in place in attempting to bring the project as far as possible in achieving its results within its programmed budget and (extended) time. It will also analyse how delays, if any, have affected project execution, costs and effectiveness. Wherever possible, costs and time over results ratios of the project will be compared with that of other similar interventions. The evaluation will give special attention to efforts by the project teams to make use of/build upon pre-existing institutions, agreements and partnerships, data sources, synergies and complementarities with other initiatives, programmes and projects etc. to increase project efficiency all within the context of project execution.
44. The project appears to have experienced delays due to disagreements on the handling and ownership of data. What lessons can be learnt for future projects? To what extent did these challenges have an impact on the delivery of project outcomes and the achievement of the project objective?

12 Factors and processes affecting project performance

45. **Preparation and readiness.** This criterion focusses on the quality of project design and preparation. Were project stakeholders⁹⁵ adequately identified? Were the project's objectives and components clear, practicable and feasible within its timeframe? Were the capacities of executing agencies properly considered when the project was designed? Was the project document clear and realistic to enable effective and efficient implementation? Were the partnership arrangements properly identified and the roles and responsibilities negotiated prior to project implementation? Were counterpart resources (funding, staff, and facilities) and enabling legislation assured? Were adequate project management arrangements in place? Were lessons from other relevant projects properly incorporated in the project design? What factors influenced the quality-at-entry of the project design, choice of partners, allocation of financial resources etc.? Were GEF environmental and social safeguards considered when the project was designed⁹⁶? Were sufficient components integrated into the project design to ensure the obtaining of commitment of government representatives? Were sufficient provisions integrated into project design to minimise delays in implementation? Were the necessary agreements for cooperation (e.g. for data sharing) in place?
46. **Project implementation and management.** This includes an analysis of implementation approaches used by the project, its management framework, the project's adaptation to changing conditions (adaptive management), the performance of the implementation arrangements and partnerships, relevance of changes in project design, and overall performance of project management. The evaluation will:

⁹⁵ Stakeholders are the individuals, groups, institutions, or other bodies that have an interest or stake in the outcome of the project. The term also applies to those potentially adversely affected by the project.

⁹⁶ <http://www.thegef.org/gef/node/4562>

- (a) Ascertain to what extent the project implementation mechanisms outlined in the project document have been followed and were effective in delivering project outputs and outcomes. Were pertinent adaptations made to the approaches originally proposed?
 - (b) Evaluate the effectiveness and efficiency of project management by NEMA and how well the management was able to adapt to changes during the life of the project.
 - (c) Assess the role and performance of the units and committees established and the project execution arrangements at all levels.
 - (d) Assess the extent to which project management as well as national partners responded to direction and guidance provided by the Steering Committee and UNEP supervision recommendations.
 - (e) Identify operational and political / institutional problems and constraints that influenced the effective implementation of the project, and how the project partners tried to overcome these problems. How did the relationship between the various partners and the management team develop?
 - (f) Assess the extent to which MTE recommendations were followed in a timely manner.
 - (g) Assess the extent to which the project implementation met GEF environmental and social safeguards requirements.
- d. **Stakeholder participation and public awareness.** The term stakeholder should be considered in the broadest sense, encompassing project partners, government institutions, private interest groups, local communities etc. The TOC analysis should assist the evaluators in identifying the key stakeholders and their respective roles, capabilities and motivations in each step of the causal pathway from activities to achievement of outputs and outcomes to impact. The assessment will look at three related and often overlapping processes: (1) information dissemination between stakeholders, (2) consultation between stakeholders, and (3) active engagement of stakeholders in project decision making and activities. The evaluation will specifically assess:
- (a) the approach(es) used to identify and engage stakeholders in project design and implementation. What were the strengths and weaknesses of these approaches with respect to the project's objectives and the stakeholders' motivations and capacities? What was the achieved degree and effectiveness of collaboration and interactions between the various project partners and stakeholders during design and implementation of the project?
 - (b) the degree and effectiveness of any public awareness activities that were undertaken during the course of implementation of the project; or that are built into the assessment methods so that public awareness can be raised at the time the assessments will be conducted;
 - (c) how the results of the project (strategic programmes and plans, monitoring and management systems, sub-regional agreements etc.) promote participation of stakeholders in decision making.
- e. **Country ownership and driven-ness.** The evaluation will assess the performance of national partners involved in the project, as relevant:
- (a) In how far has the national partner assumed responsibility for the project and provided adequate support to project execution, including the degree of cooperation received from the various public institutions involved in the project and the timeliness of provision of counter-part funding to project activities?
 - (b) To what extent has the national and regional political and institutional framework been conducive to project performance?
 - (c) How responsive were the national partners to NEMA and CSWCT coordination and guidance, and to UNEP supervision?
- f. **Financial planning and management.** Evaluation of financial planning requires assessment of the quality and effectiveness of financial planning and control of financial resources throughout the project's lifetime. The assessment will look at actual project costs by activities compared to budget (variances), financial management (including disbursement issues), and co-financing. The evaluation will:
- (a) Verify the application of proper standards (clarity, transparency, audit etc.) and timeliness of financial planning, management and reporting to ensure that sufficient and timely financial resources were available to the project and its partners;
 - (b) Appreciate other administrative processes such as recruitment of staff, procurement of goods and services (including consultants), preparation and negotiation of cooperation agreements etc. to the extent that these might have influenced project performance;

- (c) Present to what extent co-financing has materialized as expected at project approval (see Table 1 and 3). Report country co-financing to the project overall, and to support project activities at the national level in particular. The evaluation will provide a breakdown of final actual costs and co-financing for the different project components (see tables in Annex 3).
- (d) Describe the resources the project has leveraged since inception and indicate how these resources are contributing to the project's ultimate objective. Leveraged resources are additional resources—beyond those committed to the project itself at the time of approval—that are mobilized later as a direct result of the project. Leveraged resources can be financial or in-kind and they may be from other donors, NGO's, foundations, governments, communities or the private sector.
 - g. Analyse the effects on project performance of irregularities (if any) in procurement, use of financial resources and human resource management, and the measures taken by NEMA and CSWCT or UNEP to prevent such irregularities in the future. Appreciate whether the measures taken were adequate.
 - h. **UNEP supervision and backstopping.** The purpose of supervision is to verify the quality and timeliness of project execution in terms of finances, administration and achievement of outputs and outcomes, in order to identify and recommend ways to deal with problems which arise during project execution. Such problems may be related to project management but may also involve technical/institutional substantive issues in which UNEP has a major contribution to make. The evaluators should assess the effectiveness of supervision and administrative and financial support provided by UNEP including:
 - (a) The adequacy of project supervision plans, inputs and processes;
 - (b) The emphasis given to outcome monitoring (results-based project management);
 - (c) The realism and candour of project reporting and ratings (i.e. are PIR ratings an accurate reflection of the project realities and risks);
 - (d) The quality of documentation of project supervision activities; and
 - (e) Financial, administrative and other fiduciary aspects of project implementation supervision.
 - i. **Monitoring and evaluation.** The evaluation will include an assessment of the quality, application and effectiveness of project monitoring and evaluation plans and tools, including an assessment of risk management based on the assumptions and risks identified in the project document. The evaluation will appreciate how information generated by the M&E system during project implementation was used to adapt and improve project execution, achievement of outcomes and ensuring sustainability. M&E is assessed on three levels:
 - (a) *M&E Design.* Projects should have sound M&E plans to monitor results and track progress towards achieving project objectives. An M&E plan should include a baseline (including data, methodology, etc.), SMART indicators and data analysis systems, and evaluation studies at specific times to assess results. The time frame for various M&E activities and standards for outputs should have been specified. The evaluators should use the following questions to help assess the M&E design aspects:
 - Quality of the project logframe (original and possible updates) as a planning and monitoring instrument; analyse, compare and verify correspondence between the original logframe in the Project Document, possible revised logframes and the logframe used in Project Implementation Review reports to report progress towards achieving project objectives;
 - SMART-ness of indicators: Are there specific indicators in the logframe for each of the project objectives? Are the indicators measurable, attainable (realistic) and relevant to the objectives? Are the indicators time-bound?
 - Adequacy of baseline information: To what extent has baseline information on performance indicators been collected and presented in a clear manner? Was the methodology for the baseline data collection explicit and reliable?
 - Arrangements for monitoring: Have the responsibilities for M&E activities been clearly defined? Were the data sources and data collection instruments appropriate? Was the frequency of various monitoring activities specified and adequate? In how far were project users involved in monitoring?
 - Arrangements for evaluation: Have specific targets been specified for project outputs? Has the desired level of achievement been specified for all indicators of objectives and outcomes? Were there adequate provisions in the legal instruments binding project partners to fully collaborate in evaluations?
 - Budgeting and funding for M&E activities: Determine whether support for M&E was budgeted adequately and was funded in a timely fashion during implementation.

(b) *M&E Plan Implementation.* The evaluation will verify that: the M&E system was operational and facilitated timely tracking of results and progress towards projects objectives throughout the project implementation period; annual project reports and Progress Implementation Review (PIR) reports were complete, accurate and with well justified ratings; the information provided by the M&E system was used during the project to improve project performance and to adapt to changing needs.

(c) *Use of GEF Tracking Tools.* These are portfolio monitoring tools intended to roll up indicators from the individual project level to the portfolio level and track overall portfolio performance in focal areas. Each focal area has developed its own tracking tool⁹⁷ to meet its unique needs. Agencies are requested to fill out at CEO Endorsement (or CEO approval for MSPs) and submit these tools again for projects at mid-term and project completion. The evaluation will verify whether UNEP has duly completed the relevant tracking tool for this project, and whether the information provided is accurate.

13 Complementarities with UNEP strategies and programmes

47. UNEP aims to undertake GEF funded projects that are aligned with its own strategies. The evaluation should present a brief narrative on the following issues:

- (a) *Linkage to UNEP's Expected Accomplishments and POW 2010-2011 and 2012-2013.* The UNEP MTS specifies desired results in six thematic focal areas. The desired results are termed Expected Accomplishments. Using the completed ToC/ROTI analysis, the evaluation should comment on whether the project makes a tangible contribution to any of the Expected Accomplishments specified in the UNEP MTS. The magnitude and extent of any contributions and the causal linkages should be fully described. Whilst it is recognised that UNEP GEF projects designed prior to the production of the UNEP Medium Term Strategy 2010-2013 (MTS)⁹⁸ would not necessarily be aligned with the Expected Accomplishments articulated in those documents, complementarities may still exist and it is still useful to know whether these projects remain aligned to the current MTS.
- (b) *Alignment with the Bali Strategic Plan (BSP)*⁹⁹. The outcomes and achievements of the project should be briefly discussed in relation to the objectives of the UNEP BSP.
- (c) *Gender.* Ascertain to what extent project design, implementation and monitoring have taken into consideration: (i) possible gender inequalities in access to and the control over natural resources; (ii) specific vulnerabilities of women and children to environmental degradation or disasters; and (iii) the role of women in mitigating or adapting to environmental changes and engaging in environmental protection and rehabilitation. Appreciate whether the intervention is likely to have any lasting differential impacts on gender equality and the relationship between women and the environment. To what extent do unresolved gender inequalities affect sustainability of project benefits?
- (d) *South-South Cooperation.* This is regarded as the exchange of resources, technology, and knowledge between developing countries. Briefly describe any aspects of the project that could be considered as examples of South-South Cooperation.

e. The Consultants' Team

48. For this evaluation, the evaluation team will consist of one consultant. The consultant should have experience in project evaluation. A Master's degree or higher in the area of environmental sciences or a related field and at least 15 years' experience in environmental management, with a preference for specific expertise in the area of Payments for Ecosystem Services and forest conservation is required.
49. By undersigning the service contract with UNEP/UNON, the consultants certify that they have not been associated with the design and implementation of the project in any way which may jeopardize their independence and impartiality towards project achievements and project partner performance. In addition, they will not have any future interests (within six months after completion of the contract) with the project's executing or implementing units.

⁹⁷ http://www.thegef.org/gef/tracking_tools

⁹⁸ <http://www.unep.org/PDF/FinalMTSGCSS-X-8.pdf>

⁹⁹ <http://www.unep.org/GC/GC23/documents/GC23-6-add-1.pdf>

f. Evaluation Deliverables and Review Procedures

50. The evaluation consultant will prepare an **inception report** (see Annex 2(a) of TORs for Inception Report outline) containing a thorough review of the project context, project design quality, a draft reconstructed Theory of Change of the project, the evaluation framework and a tentative evaluation schedule.
51. The review of design quality will cover the following aspects (see Annex 9 for the detailed project design assessment matrix):
 - Strategic relevance of the project
 - Preparation and readiness (see paragraph 25);
 - Financial planning (see paragraph 30);
 - M&E design (see paragraph 33(a));
 - Complementarities with UNEP strategies and programmes (see paragraph 34);
 - Sustainability considerations and measures planned to promote replication and upscaling (see paragraph 23).
52. The inception report will also present a draft, desk-based reconstructed Theory of Change of the project. It is vital to reconstruct the ToC *before* the most of the data collection (review of reports, in-depth interviews, observations on the ground etc.) is done, because the ToC will define which direct outcomes, drivers and assumptions of the project need to be assessed and measured to allow adequate data collection for the evaluation of project effectiveness, likelihood of impact and sustainability.
53. The evaluation framework will present in further detail the evaluation questions under each criterion with their respective indicators and data sources. The evaluation framework should summarize the information available from project documentation against each of the main evaluation parameters. Any gaps in information should be identified and methods for additional data collection, verification and analysis should be specified.
54. The inception report will also present a tentative schedule for the overall evaluation process, including a draft programme for the country visit and tentative list of people/institutions to be interviewed.
55. The inception report will be submitted for review and approval by the Evaluation Office before the evaluation team travels to the field.
56. **The main evaluation report** should be brief (no longer than 35 pages – excluding the executive summary and annexes), to the point and written in plain English. The evaluation team will deliver a high quality report in English by the end of the assignment. The report will follow the annotated Table of Contents outlined in Annex 1. It must explain the purpose of the evaluation, exactly what was evaluated and the methods used (with their limitations). The report will present evidence-based and balanced findings, consequent conclusions, lessons and recommendations, which will be cross-referenced to each other. The report should be presented in a way that makes the information accessible and comprehensible. Any dissident views in response to evaluation findings will be appended in footnote or annex as appropriate. To avoid repetitions in the report, the authors will use numbered paragraphs and make cross-references where possible.
57. **Review of the draft evaluation report.** The evaluation team will submit the zero draft report latest two weeks after conducting the field visits to the UNEP EO and revise the draft following the comments and suggestions made by the EO. Once a draft of adequate quality has been accepted, the EO will share this first draft report with the UNEP Task Manager, who will ensure that the report does not contain any blatant factual errors. The UNEP Task Manager will then forward the first draft report to the other project stakeholders, in particular NEMA and the national partners for review and comments. Stakeholders may provide feedback on any errors of fact and may highlight the significance of such errors in any conclusions. It is also very important that stakeholders provide feedback on the proposed recommendations and lessons. Comments would be expected within two weeks after the draft report has been shared. Any comments or responses to the draft report will be sent to the UNEP EO for collation. The EO will provide the comments to the evaluation team for consideration in preparing the final draft report.
58. The evaluation consultant will submit the final draft report no later than 2 weeks after reception of stakeholder comments. The consultant will prepare a **response to comments**, listing those comments not or only partially accepted by them that could therefore not or only partially be accommodated in the final report. They will explain why those comments have not or only partially been accepted, providing evidence as required. This response to comments will be shared by the EO with the interested stakeholders to ensure full transparency.
59. Submission of the final Terminal Evaluation report. The final report shall be submitted by Email to the Head of the Evaluation Office, who will share the report with the Director, UNEP/GEF Coordination Office and the UNEP/DEPI Task Manager. The Evaluation Office will also transmit the final report to the GEF Evaluation Office.

60. The final evaluation report will be published on the UNEP Evaluation Office web-site www.unep.org/eou. Subsequently, the report will be sent to the GEF Office of Evaluation for their review, appraisal and inclusion on the GEF website.
61. As per usual practice, the UNEP EO will prepare a **quality assessment** of the first draft and final draft report, which is a tool for providing structured feedback to the evaluation consultants. The quality of the report will be assessed and rated against the criteria specified in Annex 4.
62. The UNEP Evaluation Office will assess the ratings in the final evaluation report based on a careful review of the evidence collated by the evaluation consultant and the internal consistency of the report. Where there are differences of opinion between the evaluator and UNEP Evaluation Office on project ratings, both viewpoints will be clearly presented in the final report. The UNEP Evaluation Office ratings are the final ratings that will be submitted to the GEF Office of Evaluation.

46. Logistical arrangement

61. This Terminal Evaluation will be undertaken by an independent evaluation consultant contracted by the UNEP Evaluation Office. The consultant will work under the overall responsibility of the UNEP Evaluation Office and will consult with the EO on any procedural and methodological matters related to the evaluation. It is, however, the consultants' individual responsibility to arrange for their travel, visa, obtain documentary evidence, plan meetings with stakeholders, organize field visits (if any), and any other logistical matters related to the assignment. The UNEP Task Manager and NEMA will, where possible, provide logistical support (introductions, meetings, transport etc.) for the country visit, allowing the consultants to conduct the evaluation as efficiently and independently as possible.

h. Schedule of the evaluation (tentative)

Activity	Date (s)
Start of the evaluation	7 April 2015
Inception report	27 April 2015
Comments from Evaluation Office	4 May 2015
Field visits	17-30 May 2015
Zero Draft report	12 June 2015
Comments from Evaluation Office	19 June 2015
First draft report	26 June 2015
Comments from stakeholders	10 July 2015
Final report	24 July 2015

62. The consultant will be hired under an individual Special Service Agreement (SSA). There are two options for contract and payment: lumpsum or "fees only".
63. **Lumpsum:** The contract covers both fees and expenses such as travel, per diem (DSA) and incidental expenses which are estimated in advance. The consultants will receive an initial payment covering estimated expenses upon signature of the contract.
64. **Fee only:** The contract stipulates consultant fees only. Air tickets will be purchased by UNEP and 75% of the DSA for each authorised travel mission will be paid up front. Local in-country travel and communication costs will be reimbursed on the production of acceptable receipts. Terminal expenses and residual DSA entitlements (25%) will be paid after mission completion.
65. The payment schedule for the consultant will be linked to the acceptance of the key evaluation deliverables by the Evaluation Office:

Final inception report: 20 percent of agreed total fee
First draft main evaluation report: 40 percent of agreed total fee
Final main evaluation report: 40 percent of agreed total fee

66. In case the consultants are not able to provide the deliverables in accordance with these TORs, in line with the expected quality standards by the UNEP Evaluation Office, payment may be withheld at the discretion of the Head of the Evaluation Office until the consultants have improved the deliverables to meet UNEP's quality standards.
67. If the consultants fail to submit a satisfactory final product to UNEP in a timely manner, i.e. within one month after the end date of their contract, the Evaluation Office reserves the right to employ additional human resources to finalize the report, and to reduce the consultants' fees by an amount equal to the additional costs borne by the Evaluation Office to bring the report up to standard.
68. Submission of the final evaluation report:

The final report shall be submitted by email to:

Mr. Michael Spilsbury, Director
UNEP Evaluation Office
Email: michael.spilsbury@unep.org

The Head of Evaluation will share the report with the following persons:

Kelly West, Director
UNEP/ GEF Coordination Office
Email: Kelly.west@unep.org

Shakira Khawaja
Fund Management Officer
UNEP/DEPI-GEF
Email: shakira.khawaja@unep.org

Ersin Esen
GEF Task Manager
UNEP/DEPI
Email: ersin.esen@unep.org

69. The final evaluation report will be published on the UNEP Evaluation Office web-site www.unep.org/eou and may be printed in hard copy.

SCHEDULE OF MAIN PROJECT ACTIVITIES

Activity	Dates
Census of study region	Sept 2010 – Feb 2011
Selection of sample villages	Mar 2011
Baseline survey of 1,275 PFOs	Apr-May 2011
Baseline satellite images	May 2011-Jan 2012
Public lotteries to draw treatment and control villages	Jul-Dec 2011
CSWCT holds meetings in each village to explain the PES scheme and Rollout of PES scheme	Aug 2011 – Feb 2012
Land mapping and midline survey	Feb - Mar 2012
First year of scheme	July 2012-June 2013
Year 1 payments	Aug-Dec 2012
Endline satellite images	Jan-Mar 2013
Endline survey of PFOs	Jul-Nov 2013
Second year of scheme	July 2013-June 2014
Year 2 payments	Oct 2013-Feb 2014
Analysis of research findings	April-Dec2014 (and on-going)

Note : Baseline and endline satellite images are a maximum of 22 months apart

RESPONSE TO STAKEHOLDER COMMENTS

Response to stakeholder comments received but not (fully) accepted by the evaluator

Comments to the first draft of the evaluation report of the project “Developing an Experimental Methodology for Testing the Effectiveness of Payment for Ecosystem Services to Enhance Conservation in Production Landscapes in Uganda” and responses from UNEP EOU and independent evaluator

30 November 2015

Reference	Comment	EOU comment	Evaluator response
4 and 7	This seems to contradict with statement in highlighted section in section 4	Evaluator to please check and verify that the two refer to the same type of capacity.	I don't believe it contradicts as both sentences say capacity has been built. However, I have removed the phrase 'although limited' from the sentence on paragraph 4.
15	Determination of off-take level was based on information and reports from the PPG and other studies in the landscape as well as on local knowledge and experience of CSWCT and NAHI in the landscape. These showed that some uses of forests such as firewood collection, hoe handle collection-for household use ONLY, had no significant impact on the forest structure and its regeneration. In fact previous studies in Budongo Forest () have shown that gaps in the forests may promote natural regeneration and diversity of tree species. I am not comfortable with “undermines forest regeneration” here!	Evaluator to please verify.	My assertion was based on information provided by interviewees (two independent technically qualified interviewees – I cannot name them for reasons of confidentiality). I have changed this to include the text to '(according to some interviewees this can undermine forest regeneration and it is unclear whether the level would be sustainable, although this view was disputed by others'
19	Project was known to some extent, maybe not as sufficiently as it should have been in UNEP and GEF but certainly IIED helped with this through IIED conference in 2014 and Participation in DOHA Climate Talks.	Point notes, paragraph refers mostly to internal UNEP coordination	Point accepted, although it isn't widely known as a project outside of Uganda. This is not the project teams fault, but UNEPs for not promoting it. Since the text can be misinterpreted, I have changed the text to ' not well known within UNEP' which is 100% true!
R1	It is elections in Uganda in February 2016 and of course the Christmas and new year Holiday season. I would suggest extending	EOU agrees (even though this further	No, I agree. Need to be realistic. I have changed the date from April to July 2016. That should give them enough time. The problem though is not so

	this by 3 or 4 more months.	stretches the period without funds) unless evaluator has a diverging opinion on need to faster implementation (taking feasibility into account).	much the Ugandans as the international research team and what they will do with the analysis and results as it stands as they are under no obligation to continue.
61	September 2010 not 2011	Noted.	Text changed from 2011 to 2010.
67	The total Budget for PFOs stayed within the earlier budgeted amounts because we still ended up with 342 landowners signing up, which was within the earlier estimated 400. What increased was the cost to execute the PES scheme and deliver the payments which we covered from Darwin Co-financing	Evaluator to consider adding a note for clarity.	I have added the following footnote for clarity. ‘The total budget for the PFOs stayed within the earlier budgeted amount because 342 landowners signed up, which was within the earlier target of 400 which had been budgeted for. However, the cost to execute the PES scheme and deliver the payments increased as a result of the increase in the number of villages from 40 to 70, which had to be covered by co-financing from the Darwin Initiative.
71	I am not aware of any other agreements that set out the full role and position within the decision-making hierarchy of the international research team members. My understanding is that they were ‘managed’ by IPA but the TE was not able to interview the Deputy Director during his visit to IPA offices in Kampala. So, was there anything in writing? Comment: IPA was managing the international scientists. Specifically: 1. Can you clarify what, if any, formal written agreements NEMA had with the international researchers? If so (in either case) who were these with and what were the requirements/conditions?	For evaluator’s action.	In the absence of feedback from Joost, I suggest I use the following text as a footnote: The TE heard concerns about the dominance of the international researchers in the decision-making process within the Project yet they did not appear to have any formal agreed decision-making power. The TE consultant understands that the group of international scientists had an agreement with IPA who were responsible for managing their work. NEMA had a written agreement with IPA and it was understood that IPA would manage the international researchers.. It is unclear whether there were any formal written agreements between IPA

	<p>Comment: Agreement was with IPA and it was understood that IPA would manage the international researchers</p> <p>2. Similarly, were there any formal written agreements between IPA and the international researchers. If so (in either case) who were these with and what were the requirements/conditions?</p> <p>Comment: Not sure. Off to Joost</p> <p>3. Who had management responsibility/authority for the international researchers within the Project - NEMA, CSWCT, IPA or UNEP in Nairobi? Comment; IPA</p> <p>The TE heard concerns about the dominance of the international researchers in the decision-making process within the Project yet they did not appear to have any formal agreed decision-making power.</p> <p>4. NEMA continued to pay IPA so presumably NEMA was not unhappy with IPA's performance, including its (assumed) management of the international researchers.</p>		<p>and the international researchers, and if these existed who were these with and what the requirements/conditions were. Unfortunately, the TE was not able to interview the Deputy Director during his visit to IPA offices in Kampala, and those IPA staff members of IPA who were interviewed were not clear on the exact arrangements. Members of the international research group was asked to provide their own views on this issue but no comments were received by the deadline for reviewing the draft TE report.</p> <p>However, it would be more appropriate later on in the document – paragraph 295</p>
112	These were a few and not “A number” of them as shown here.	Noted, for correction.	Changed text to ‘ a few’
113	The first compliance Monitoring and Payment Period was (July 2012-January 2013) and the second was (July 2013-March 2014).	Noted, for correction	Corrected in text
119	CSWCT considered 413 because those are the ones that expressed interest/applied to join the scheme through the application process that was introduced as part of the consultation process. The 600 in Joost’s presentation was the average number of PFOs in a village (according to IPA baseline) As you rightly note, this could be the different numbers and interpretations being used here.)	For evaluators’ action	<p>I have left in the figures given by CSWCT.</p> <p>I have however put the following footnote that there are differences between the different groups in the figures used and given what explanation I have for this.</p>

	<p>The 4 villages were used to pre-test the design and implementation tools and were considered not appropriate to include in the analysis</p> <p>The difference (between 338 and 342 PFOs) could be the 4 institutions that (Munteme Catholic Parish, St. Joseph's TECO Munteme, Kahojo LC1 & Fabian Tibeita that returned their signed copies of contracts later than others because they had to consult widely first with their institutions. Fabian Tibeita lived in Kampala and it took us time to get hold of him and return his contract.</p>		<p>'It should be noted that different partners within the Project have given different figures of achievement in their reports (for instance, the international researchers consider the uptake rate to be 34% whereas the CSWCT's view was that it was 53%). These differences appear to reflect a difference of opinion over how many individuals were in the initial interested group, which were used in the calculations. The CSWCT only considered PFOs who expressed interest/applied to join the scheme through the application process that was introduced as part of the consultation process which totaled 413; whereas the figure of 600 given in presentations by the international researchers appears to have been the average number of PFOs in a village (according to IPA baseline).'</p> <p>But the fact that the international researchers use other figures suggests a certain lack of communication, discussion and agreement between the main parties on just how many people they were dealing with....</p>
135	I believe CSWCT & NAHI can analyse these [biodiversity data]. During the project, these were pre-occupied with other aspects of project implementation in view of their MoUs and the CSWCT had a lean staff.	This seems to support R1.	OK, I don't think any additional text is needed here since R1 says 'with the support of CSWCT and NAHI'.
156	All or at least majority of PFOs had other land where they could grow food. Although the desire for forest land is because they may not need to use fertilizers in the first 3 years which may not be the case with other land that they may have available.	Ok noted, no change needed.	Noted but no action needed.
192	its actually very clear now. PES is stressed as an important biodiversity financing mechanism	NBSAP text to be updated.	I have included a footnote to reflect this.
220	Actually promotion of PES in environmental legislation is recent and was not existing prior to the project start. If you talk to Francis and the initial idea was linked to an international meeting/workshop he/they attended and later, the zeal by the ED then and Lilly to apply the concept in Hoima to save the	To be updated	I have included a footnote to include the information provided by Paul and deleted the last sentence of this paragraph ('This perhaps illustrates the point that decision-makers do not necessarily feel they have to only use or rely on scientific information before

	chimpanzee habitats. So, this project helped increase the awareness about PES coupled with learning from experiences in and outside Uganda for example from IIED and ECOTRUST.		making policy and planning decisions, even when such information is available'.)
295 and 305		Please check consistency based on comment at para 71 on IPA formal working relationship with international researchers	See comment and suggested solution above under para 71.
333	I agree. I believe UNEP and NEMA should have talked more about this. It was also interesting because UNEP view was that sustainability was not critical in this project yet the CSWCT, IIED and to some extent NEMA wanted this Sustainability aspect strengthened. The international researchers seemed wielded a lot of power partly because of the prior connection that the TM had with UNEP.	Ok noted, no change needed.	No changes made on basis of response from Paul.
336	Budget discussion largely affected NAHI component. Remember that NAHI and IPA were sharing the evaluation budget & NAHI was a sub-contractor of IPA under the evaluation budget. In the end, the NAHI had to do one round of surveys and left the other part for satellite images- ie end line survey. The budgets of the others remained the same. Eg the CSWCT used the first and second Darwin Co-financing.	Further clarification may be needed to the text.	Footnote added to text.
354	I have added a missing meeting	Noted.	OK.
373	See in the MTR report. We calculated this together with Johns (on cost effectiveness)	Please revise based on data from MTR.	No, this wasn't done at the MTR stage. Johns suggested it should be done by the time of the TE as, obviously, the results of the change in deforestation and regeneration were not available half way through the project. Also, there have been more costs since the MTR, so new data would need to be analysed. This is not the role of the TE. It should be presented in the paper giving the final results. So this is something the project team should do with the researchers and

			present in any updated set of results (final results based on the additional analysis suggested in recommendation 1).
Lesson 6	<p>Payment level – I don't think the main consideration was the amounts paid in schemes in other countries. The starting point was a rough estimate made by IPA of the amount PFOs could earn from felling a tree and from selling crops. It was revised downwards to UGX 70,000 for use in the 'pilot' consultations with PFOs in four villages. The intention was to have a conservative estimate for the consultations with the reasoning being that if there was an adverse reaction it could be raised later. If the initial level proved to be too high (in relation to the costs incurred by the PFOs) it would be difficult to lower it because of the raised expectations. The reactions from these first consultations were quite mixed</p> <p>But it was important to look at the demand side too. When there was later a discussion about increasing the payment level, I contributed some rough estimates of carbon revenues under different assumptions about price and leakage discount and how much of a share of the revenue the landowners could receive taking into consideration the cost for the project developer/scheme administrator. This used estimates of average carbon density supplied by WCS. This analysis showed that US\$35/ha was on the high side and would be viable only with the most favourable assumptions. The carbon market, (both the voluntary market and the emerging REDD+ programmes) appeared to be the most likely source of revenue at the time. It therefore seemed important for reasons of financial sustainability to keep the payment at a level that could be compatible with what was being paid in the voluntary carbon market. Since then, prices in the voluntary carbon market have dropped so the payment level seems even less sustainable. (This accords with the point made in footnote 47 on page 62) of the report.</p> <p>So while there are indications that the costs of conservation are higher than the payment level and that the level should therefore be increased, the indications on the demand side at least for 'carbon plus'</p>	<p>Evaluator to please consider if further clarifications required / modifications about payment levels.</p>	<p>This is partly covered in an annex (based on something Maryanne write for the MTE). I have taken out the text 'which were estimated based on (among other things) comparison with levels paid under PES schemes in other parts of the world', as these seem to be the problem words here.</p> <p>A general point here is that I recommended that the various groups get together and have a lesson learning exercise on the experiences of setting up and running a PES scheme and how to assess it. The information given by Maryanne is a topic for such a discussion/lesson learning exercise.</p> <p>I had very little information about the demand side during the evaluation (and nothing on carbon) and it wasn't something that was highlighted by interviewees. Again, this is something that I feel should be explored as part of a formal project lesson learning exercise. It is a bit beyond this evaluation.</p>

	are that it needs to be reduced		
Recommendation 5	<p>Financial sustainability was thought about by CSWCT and IIED but the carbon market and getting the scheme into the National REDD programme and forming part of the NARCG Murchison-Semliki Landscape REDD+ project seemed like the best options for financial sustainability at the time. This however, put a brake on any efforts to pursue certification and sale of carbon credits through Plan Vivo as this was considered incompatible. Note that financial sustainability was also a consideration in the determination of the payment level or rather the decision not to raise it after the initial consultations (as discussed above). While the focus was on carbon, this was not necessarily ignoring the other ecosystem services associated with forests. The intention was that it would be <i>carbon plus</i> other benefits both in terms of ecosystem services and livelihoods. This was the approach taken in the concept note prepared for Barclays Bank via the Cambridge Programme for Sustainability Leadership.</p>	<p>Point noted, however it would seem that in the current circumstances the Plan Vivo certification would be more suitable, evaluator to please confirm or amend as necessary.</p>	<p>Yes, the consensus among those that I interviewed was that PlanVivo was more likely. The Gov of Uganda in particular was rather skeptical about REDD+ money becoming available any time soon (Paris COP may change that now) but the opinion of the government staff connected with the REDD+ debate was that money would not be available to the project through REDD+ as they had other projects in mind.</p> <p>However, I have included Marianne's comments as a footnote in the text.</p>
Lesson 5	<p>Private sector - It is important not to under-estimate the challenges in getting the private sector to pay for ecosystem services and to demonstrate a business case. It is not just the challenge and cost of gathering the data but also the public good/lack of incentive issue. The majority of PES schemes particularly for watershed services are funded by the public sector (See Forest Trends report on State of Watershed Investments 2014). The private sector often gets involved when there is a regulatory change.</p>	<p>Point noted.</p>	<p>I have included this as a footnote as it is a valid point.</p>
General (sustainability)	<p>An addition on the sustainability WCS is with our Darwin grant building upon the PES project and employing the community based monitors.</p> <p>Furthermore we are providing the PFOs rural financial services and improved agricultural practices and linking them with markets.</p> <p>In other words sustainability is ensured.</p>	<p>Evaluator to consider.</p>	<p>I have included the following as a footnote under paragraph:</p> <p>One reviewer stated that "WCS is, with our Darwin grant, building upon the (UNEP-GEF) PES project and employing the community based monitors. Furthermore, we are providing the PFOs with rural financial services and improved agricultural practices and linking them with markets. In other words sustainability is ensured." However, it is not clear whether this involves all the community based monitors and PFOs that have been</p>

			<p>involved with the project.”</p> <p>I interviewed Miguel and he didn't mention this so it may be recent.</p>
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EVALUATION PROGRAM AND INTERVIEWEES

Terminal Evaluation schedule

Task/Deliverable	Date
Initial desk reviews and preliminary interviews dealing with project design stage and establishing approach, methodology, schedule of work, etc. for the TE	1-27 May 2015
Submission of final Inception Report	28 May
Data compilation including further desk reviews, interviews and consultations, field mission to Nairobi and Uganda and follow-up Skype interviews	31 May – 1 July
- Travel to Nairobi	31 May
- Interview with previous UNEP Task Manager	1 June
- Interviews with Evaluation Office, and UNEP staff including current UNEP Task Manager at UNEP HQ in Nairobi	2 June
- Travel from Nairobi to Kampala, interviews with Project manager and Director of CSWCT, Entebbe	3 June
- Interviews with Project partners and stakeholders in Kampala	4-5 June
- Travel to Hoima	6 June
- Interview with members of project team	7 June
- Interviews with local and District stakeholders in Hoima District, visit to field sites, and return to Kampala	8-10 June
- Interviews with NEMA staff and other national level partners and stakeholders	11-12 June
- Return to UK	13 June
Submission of draft Terminal Evaluation Report	31 August
Submission of final Terminal Evaluation Report	11 December

Stakeholder and name	Contact address/phone no.	Reasons for involvement in evaluation
UNEP		
Implementing agency and represented on the PSC		
Ersin Esen	Ersin.Esen@unep.org	UNEP Task Manager
Esther Mwangi	esthermwangi2010@gmail.com	Former UNEP task Manager
Elisa Calcaterra,	Elisa.Calcaterra@unep.org	Evaluation Officer, UNEP Evaluation Office
National Environment Management Authority (NEMA) in Kampala		
Executing body for the Project. Responsible for coordinating, monitoring, supervising and regulating all environmental management matters in the country, including governance of protected areas. Represented on the PSC and TC		
Dr Tom O. Okurut	tokurut@nemaug.org	Executive Director NEMA
Francis Ogwal	fogwal@nemaug.org	PES Project Coordinator, CBD Focal point & Biodiversity Specialist
Ronald Kaggwa	rkaggwa@nemaug.org	Economist/ Chair of the PSC and TC
Christine Akello	cakello@nemaug.org	Senior Legal counsel and member of TC
Chimpanzee Sanctuary and Wildlife Conservation Trust (CSWCT)		
Selected by NEMA as main contractor to execute project, particularly administration of payment of the scheme and		

general project management. Hosts the Project Management Unit, based in Hoima. Represented on the PSC and TC.		
Paul Hatanga	phatanga@yahoo.co.uk	Project Manager
Lilly Ajarova	director@ngambaisland.org	CSWCT Director
Nebat Kasozi	Kasozi.nebat@gmail.com	Conservation Officer, based in Hoima
Rukangobya Esau	0777391543	Community Monitor, based in Hoima District
Kiiza Vicent	0779711827	Community Monitor, based in Hoima District
Ategeka Hillary	0779719282	Community Monitor, based in Hoima District
Nyangaya Victor	0783901312	Community Monitor, based in Hoima District
Nature Harness Initiative (NAHI)		
Project partner. Linking the private sector to participate in the project and experience of valuation of carbon and ecosystem services of private forests in Albertine Rift		
Mr. Byamukama Biryahwaho	bbyamukama@natureharness.or.ug bbyamukama21@yahoo.com	Executive Director. Member of the PSC.
International Institute for Environment and Development (IIED)		
Project partner, and originally to be co-executing agency. Input to design of project, collection and analysis of data, and promotion of PES results outside of Uganda, and particularly advising on supply side activities 1) defining and agreeing with landowners the land management activities that will be paid for, (2) address the demand side activities to promote the scheme to potential national and international buyers and (3) establishment of an appropriate institutional framework to manage the scheme.		
Maryanne Grieg Gran	mggran@btinternet.com	Left IIED recently but was involved with the project right from the start.
Ina Porras	ina.porras@iied.org	Based in Edinburgh office
International researchers		
Led on the design of methodology for collection of data (treatment versus control) and analysis of results from University College Utrecht (UCU)/University of Quebec At Montreal (UQAM), Stanford University/ Harvard University		
Seema Jayachandran	seema@northwestern.edu seema.jayachandran@gmail.com	Lead Investigator on social economics.
Joost de Laat	joostdelaat@gmail.com	Lead Investigator. Involved with design and reporting to PMU and steering committee, coordinating the sub-contract and all scientists. Member of the PSC.
Charlotte Yandell Stanton	stantonc@stanford.edu	Former UNEP Task Manager and international researcher on project
Innovations for Poverty Action (IPA)		
IPA role was to monitor the PES scheme and undertake the initial baseline surveys (in collaboration with IIED). Two IPA evaluation coordinators were to be based locally in Hoima district for 3 years to oversee the evaluation of the PES scheme. Represented on the PSC and TC.		
Vianney Mbonigaba	vmbonigaba@poverty-action.org	Survey Coordinator
Douglas Kaziro	dkaziro@poverty-action.org	Senior Field Manager
Joshua Bwiira	jbwiira@poverty-action.org	Field Manager
Stephen Kagera	skagera@poverty-action.org	Research Associate
Uganda Wildlife Authority		
Deals with issues of wildlife management, responsible for control of 'vermin' which have been a problem for the Project		
Richard Kapere	Richard.Kapere@ugandawildlife.org	Senior Planning Officer
Forest Sector Service Department in the Ministry of Water and Environment		
Links the project with the District Forest Services on matters concerning management of forests on private and communal lands. National focal point for REDD activities. Represented on the TC.		
Margret Mwebesa	margathieno@yahoo.com	REDD+ focal point

Hoima District Government		
Planning and implementation of environmental activities in the district. Restoration of watershed areas through afforestation, including the District Environmental and Natural Resources Officer, District Forest Officer, and District Agricultural Services		
Joseline Nyangoma	Senior Environmental Officer, Natural Resources Officer	Hoima District Council, member of Technical Committee
James Kihika	District Forest Officer	Hoima District Council, Member of Technical Committee
Representatives PFOs and other community members from Hoima and Kibaale Districts involved in the Project Participants in the pilot PES scheme (both treatment and control groups).		
Sarah Kusiima (F)	0775456640	PFO in treatment village
Wycliffe Byakora (M)	0776772389	PFO in treatment village
Valentine Barongo (M)	0782808247	PFO in treatment village
Shadrack Kyaligonza (M)	0782828410	PFO in treatment village
Paul B. Isingoma (M)	0774952234	PFO in treatment village
Gastone Kiiza (M)	0782805674	PFO in treatment village
Exavier Balyesiima (M)	0772672996	PFO in treatment village
Harriet Tibetegya (F)	0776773500	PFO in treatment village
Mrs Muhumuza Merboy		PFO in treatment village
Augustino Byenkya (M)	0775966386	PFO in control village
Peter Atakwatuulire (M)	0773171672	PFO in control village
John Bindikabona (M)	0788393033	PFO in control village
Francis B. Kiiza (M)	0772647470	PFO in control village
Foska K. Kiiza (F)	0774102569	PFO in control village
GRASP team at UNEP Nairobi		
Interest in Great Ape conservation and GRASP programme supports various chimpanzee conservation projects in region		
Dr. Johannes Refisch	Johannes.Refisch@unep.org	GRASP Project Manager
National Scientists		
Dr. Justine Namalwa		Makerere University. Been involved with REDD+ projects in Uganda and undertook a comparison of PES schemes
UN-REDD team at UNEP NBO		
Update on REDD+ funding and possibility for linkage and funding with Project once GEF funding is finished		
Daniel Pouakouyou	Daniel.Pouakouyou@unep.org	Leads on REDD+ in Uganda
IUCN		
Wide experience of PES projects including in East Africa		
Dr Agrippinah Mamara	agripnamara@yahoo.com agrip_namara@hotmail.com	Consultant, working on IUCN Forest Governance initiative. Undertook independent assessment of impact of Project on aspects of forest governance in Hoima area.
UNEP-WCMC		
Wide experience of PES projects globally		
Prof Neil Burgess	Neil.Burgess@unep-wcmc.org	Head of Science at UNEP-WCMC. Expert in ecosystem services in East Africa, including development of PES schemes.

World Wide Fund for Nature (WWF) Albertine Rift Forests Project		
Recently completed UNDP-GEF project (with WCS) in the Albertine Rift region to assess potential sustainable financing mechanisms including REDD to support protection of the northern corridor		
Mr. Thomas Otim	totim@wwfuganda.org	Program Coordinator - Forestry & Biodiversity
WCS		
Developing REDD+ project for forest areas in Uganda		
Dr. Miguel Leal	mleal@wcs.org	REDD+ Manager
Private sector businesses operating in target area		
Potential buyers of ecosystem services provided by forests of Hoima and Kibaale Districts		
Philippe Bouzet	Philippe.bouzet@tulloil.com	Tullow Oil-Environment, Kampala
Ssentumbwe Godfrey	godfreydott@gmail.com	General Manager, Hydromax
		Total Oil, Kampala

BIBLIOGRAPHY

The following documents and visual outputs were reviewed as part of the TE.

Project documents

1. Project Identification Form (PIF) for the Project
2. GEF Secretariat Review of the Project's PIF
3. PPG request
4. Request for CEO Endorsement/Approval
5. Justification for Extension of the Project for 6 months (May-October 2014)
6. Project Document and appendices
7. Annual Project Implementation Reviews (PIRs) for 2013 and 2014
8. Final Report for Project (dated November 2014?)
9. Jayachandran et al. (2014). Testing the Effectiveness of Payments for Ecosystem services to Enhance Conservation in Productive Landscapes in Uganda: A Prospective Randomized Evaluation. Final Report prepared for UNEP by Seema Jayachandran, Joost de Laat, Eric Lambin and Charlotte Stanton. Undated but believed to be December 2014. Known as the 'Impact Assessment Report'
10. Terms of Reference for the Terminal Evaluation, dated 10 April, 2015
11. Selected project correspondence between UNEP and Project Management Unit, NEMA and CSWCT provided by UNEP dating from 2008 to 2010
12. Minutes of Project's Steering Committee and Technical Committee meetings for 2011-2014
13. Terms of Reference for the Terminal Evaluation
14. Project newsletter - 'Testing Effectiveness of PES in Uganda'. Volume 1, Issue 1, June 2011. 4pp.
15. Review of partner websites hosting information on the Project including CSWCT, NEMA and IIED

Other documents

16. UNEP Mid Term Strategy for 2010-2013
17. UNEP Strategic Agenda on Forest Ecosystems and their Services (dated March 2013)
18. Biodiversity Focal Area Strategy for GEF-5 and Land Degradation (Desertification and Deforestation) Focal Area Strategy for GEF-5
19. Ferraro, Paul, J. (2012). Experimental Project Designs in the Global Environmental Facility: Designing projects to create evidence and catalyse investments to secure global environmental benefits. A STAP Advisory Document. GEF, Washington, D.C.
20. (Undated). Payments for Ecosystem Services and the Global Environmental Facility. A STAP guideline document. STAP. 13pp.
21. Namara, A. (2014). At the Expense of Democracy: Payment for Ecosystem Services in Hoima District. Responsive Forest Governance Initiative (RFGI) Final Working Paper. November 2014. 37pp.
22. Forest Governance Learning Group Uganda (2014). Narrative report for the Social Justice in Forestry Project. IIED, December 2014. 20pp.
23. Kyongera, A. (2015). Mapping private sector investments and their impacts on great ape habitats in Uganda's Albertine Rift region. Published by IIED, March 2015.

CONSULTANT(S) RÉSUMÉ

Brief CVs of the consultants

Nigel Varty is an environmental consultant with 30 years experience in biodiversity conservation policy and planning, particularly in relation to in-situ conservation (e.g. Protected Areas, NBSAPs), sustainable management of natural resources (tourism, fisheries, agriculture, forestry, energy and hunting sectors), institutional capacity building (government and NGO), ecosystem services assessment and ecosystem-based approaches to climate change adaptation, with experience of Environmental and Social Impact Assessment for the business (oil and gas and mining) sector. He has a particular interest in/knowledge of forest, wetland, coastal and island ecosystems, with long- and short-term work experience in over 30 temperate and tropical countries, particularly Least Developed Countries and Small Island Developing States, in Africa, Latin America and the Caribbean, the Western Balkans, Eastern Europe, and the Caucasus, the Middle East, and South-East Asia. He has designed and evaluated many GEF projects for the UNDP, UNEP and The World Bank, in the Biodiversity, International Waters and Land Degradation focal areas, including 11 GEF project and UN evaluations within the last 7 years. He was formerly employed by BirdLife International as a Programme Officer for 6 years.

PERCEIVED SUCCESSES AND FAILURES, STRENGTHS AND WEAKNESSES OF PROJECT REPORTED
BY INTERVIEWEES

The following are (anonymized) statements and direct quotes given in answer to the TE question “What for you personally have been the most important successes and failures, and strengths and weaknesses of the Project?” They illustrate the very wide range of views and experiences among those involved with the Project, which have not been wholly captured in the Project’s reporting. They are shown according to whether the comment came from a local, national or international level interviewee but are in no order of importance. Not more ‘successes and strengths’ were mentioned by interviewees than ‘failures and weaknesses’.

1. Perceived successes and strengths of the Project

a. Local interviewees

The rate of deforestation was reduced

Forests have grown back to some extent

Community, even in the control areas, has taken an interest

There is now greater interest in leaving forest to regenerate

The Project helped the PFO associations

Learnt a lot about why it is important to conserve the forests

How to sustain themselves without depleting the forests

Clearer ownership rights over my forest lands (previously found people logging on my land, much less so now)

I learnt about tree planting and beekeeping

I got free tree seedlings

I believe have better rainfall and water supply in area now

Some local, small-scale regeneration with less loss of forest areas in those areas targeted for payments by the Project

Illegal activity has been reduced in areas of operation

Direct community monitoring

Improvement in livelihoods for those who were part of the treatment group and paid

Practical involvement of the community in the PES scheme

b. National interviewees

Good, transparent decision-making on Project (good consultation) with Technical Committee having members from local to national level

Demonstration that 'can get money out of forests beyond timber' (good lesson for locals)

Use of Community Monitors was very effective – direct interaction with the local communities

Successful in delivering tangible results at the grass-roots level (not just a research project, or workshops)

Locals got financial incentives from the project

PES project helped support integration of PES approach into the National Environmental Policy

NEMA budget now has some funding for PES, although not for individual projects – it will be spent on developing the guidelines for PES to complement the revised National Environmental Act and Policy

The Project's experimental methodology was interesting, able to design and make this work at the community level

It helped to save the chimpanzees

Increased awareness of PES within NEMA

PES is now within the revised Environment Act and Policy through the influence of the Project

The Project has helped inform policy processes being driven by NEMA

Project has driven the production of the PES guidelines

Increased interest in PES within government so that now it is included in revisions to the new Environmental Policy and Act

The project has empowered local people with PFOs now able to argue for ownership of the land as they have a contract

Demonstrated that if local communities are given incentives they will engage in sustainable forestry management practices and these incentives can change the behaviour of local people

Some capacity has been built among government, the NGO community and academia, and the training to build capacity was very good and targeted across all stakeholders

We had a PES scheme implemented in an African country

PES is a new tool and hasn't been tested in most places so the results and experience gained from the Project have been very useful

The Project's cash payments gave the community more confidence that will be payments for the long-term for protecting their forests

It has been first successful major project which has helped to build capacity through the Trust

The Trust is now consulted by the District and national authorities on PES and it has raised the profile of the Trust

The PES element in the new WWF Rwenzori project has been substantially influenced by the GEF project, especially on its payment system, community monitoring, and research aspects, and helped established a good working relationship between the Trust and WWF

The Project has provided important socio-economic benefits to the local community with money used for medical care, school fees, and house construction among other things with direct benefit to those families involved

The partnership was very innovative with an unusual mix of partners

Very important to bring in the research element

The Project helped move PES from the boardroom to the people

It helped build awareness and capacity among very different institutions on how to implement PES and the conclusion that many players need to be involved

I believe that the increased protection of the forests has helped to regulate water levels in the local streams and rivers and this is reflected by more even regular water supply for the hydroelectric plant downstream

The non-financial benefits of the Project were significant and the PFOs now have other values beside money

c. International interviewees

Strong academic input (research is important)

Well designed econometrics data collection

Successful conditional cash transfer process developed

First of its kind – very innovative due to its research element

Take up rates of around a third are OK given this is a novel type of project for the area

Lots of actors involved who despite their differences have managed to work together

Different actors brought in different technical expertise to the project

Large databases with lots of local people involved (statistically acceptable database)

CSWCT did a good job with working with the forest owners (developed good relationships with local communities)

Given the limited resources the project had they did well to get as many landowners to sign up to the scheme, especially as most only had a small area of forest (<1.5ha)

Engaged a large number of farmers

Good capacity building for community monitoring

Community monitoring scheme was very well organised and implemented

Involved a lot of quite different stakeholder groups with particularly good partnerships between those Uganda-based groups over the Project

Actually getting results which are useful and actionable given the complexity of the project and difference in what different partners wanted to see delivered!

‘Something actually happened on the ground!’

Some good local Ugandan groups involved, notably CSWCT and NAHI

Demonstrated that can deliver a PES scheme at a local county level

Failures and weaknesses

a. Local interviewees

Not all PFOs in project (greater demand from the PFOs than resources available)

Payments were too small (need to be higher to attract more PFOs) - not much of an incentive (if any)

Payment schedule – only paid once a year which is no good for managing finances as often need money urgently

Unhappiness over arrangements for determining payments, not consultative enough with local communities

Lack of an exit strategy

Pilot covered too small an area

Project funding has finished!

Still a lack of linkage between project activities and agricultural activities in Hoima region, and poor coordination with other tree-planting initiatives in District

Lack of recognition that forests have non-monetary cultural values as well as financial

No local businesses were involved

b. national interviewees

Little direct government involvement – CSOs took over!

NEMA should have considered including Ecosystem services in EIA regulations and operations

Lack of attention by NEMA to securing private sector involvement from potential buyers

Poor NEMA collaboration with other government institutions on the Project

Cost-effectiveness, in terms of conservation value has not been good

Community bore a very high opportunity cost, which was unfair, especially as others, notably private sector, were benefiting financially without contributing anything (free ride)

The project should have involved cultural leaders more – we need to make the protection of the forests a moral issue given that local depend on it and others benefit but don't pay for their maintenance

Poor private sector involvement with no businesses signing up to cover costs of protecting the forests even if they directly benefit and they should have included local business community more

No exit strategy and there was a lack of sustainability of the PES scheme

The Project needed to identify and link to relevant markets much more (this was weak in the Project) and they now need to consider if certification is a realistic option

The design team did not include all the important patches of forest for connectivity and similarly some villages were not important parts of the chimp corridor linking the forest reserves. So there was poor linkage of biodiversity important areas as other factors dominated the selection of villages due to need to have as uniform samples as possible for the socio-economic metrics.

Poor sustainability built into project – not thought through properly at the design stage

Very poor private sector involvement and no real commitment from them

Weak project communications particularly understanding of PES within business community and other government departments

Project has created conflicts between neighbours with some non-PFOs denied access to forest areas for collecting wood or water and this has been especially a problem for women as this is one of their primary roles and increases the labour

Design of the Project as a research project – should have focused only on the PES scheme

The research project should have led to a full PES scheme (no controls) with funds set aside for a follow-up scheme

Hopes and interests of the communities have been raised which is causing frustration as there is no clear sign of a follow-up, so the long-term objective of the Project is not being met, and locals are beginning to lose trust in all NGOs operating in the region

It was expected that at the end of the Project the private sector would be fully engaged and replace the GEF funding ensuring sustainability of the PES scheme beyond the GEF project but this is not happened.

The Project was too ambitious, it was not possible to deliver biodiversity benefits in just two years – they should have come up with a new proposal after two years which was in place by the end of the GEF project

There was a lack of experience of PES within NEMA at beginning of project

There was no building of research capacity within Uganda by the international research group – we were not given the opportunity to be involved in the research

There was a disappointing lack of involvement of Uganda's local scientists in the analysis of data undertaken by the international scientists

The research component “had huge resources” which took away financing from the PES scheme

Foreign researchers did not involve academics from Makerere University and should have done

c. International interviewees

There was poor survival of seedlings, in part because of lack of water - providing a water pump near the seedlings would have helped and would have benefited women in the community as they would've had less distance to travel to collect water

The Project led people to expect that payments would continue after the project finished – this was a mistake

It is difficult to upscale from this project as it has features that appear to be specific to the Project area and results may not be applicable to other areas of Uganda

There was a difficult partnership on the project with many different actors and it didn't have everyone on the same page, and the partnership needed much more active management

Didn't have meaningful collaboration between Ugandan and international researchers – this was a missed opportunity

The Project was too short-term – only two years worth of payments, and biodiversity related surveys only took place over a two-year period which is very short to show changes

Limited final project report and researchers final report is much too technical and not suitable for policy and decision-makers

We underestimated how important the human-wildlife conflict would be to the uptake and impact of the project

There was poor thinking on the logistics of implementing the design of the PES scheme given the large number of villages that needed to be included

Complete lack of private sector buyers - those with interest mostly sent junior members to attend meetings and presentations; in other words there was no interest at the senior management and decision-making level

There was a conflict between the PES scheme, promoted by Ugandan nationals, and a research project, promoted by UNEP and international researchers

Even if the 'experiment' had been an unqualified success there was still disappointment that there was no serious attention to sustainability of the PES scheme from early design

Poor, often troubled relationships between Ugandan groups and international research up, not helped by lack of accreditation of Ugandan input on the report by international research group

NEMA did not drive the Project but took rather a back seat

PROJECT PUBLICATIONS AND PRESENTATIONS

In **PIR of July 2012-June 2013** the project featured and accomplished the following;

International presentations and conferences attended/made

At Evaluation Week organized by Uganda's Office of Prime Minister; <http://gef.opm.go.ug/wp-content/uploads/2013/04/PES-Project-Evaluation-Week1.pdf> and <http://gef.opm.go.ug/wp-content/uploads/2013/04/Presentation-on-Evaluation-study-funded-by-3ie-in-Uganda-March-2013-Evaluation-Week.pdf>

Featured on websites

CHIMPANZEE TRUST Monthly Bulletins; <http://myemail.constantcontact.com/CHIMPANZEE-TRUST-August-News-Bulletin.html?soid=1109765653620&aid=7iM16z80jc>

Featured in the National Clearing House Mechanism website of NEMA

http://chm.nemaug.org/index.php?option=com_content&view=article&id=106&Itemid=12&lang=en

Featured in PRESA website for a study undertaken by NAHI and ICRAF's Dr. Sara Namirembe

<http://presa.worldagroforestry.org/blog/2013/05/16/are-pes-incentives-adequate-for-sustainable-management-of-private-forests-in-uganda/>

Featured in the achievements section of the Wildlife Conservation under the Ministry of Tourism, Wildlife and Antiquities; http://tourism.go.ug/index.php?option=com_content&view=article&id=30&Itemid=281

Publications

CHIMPANZEE TRUST Annual report 2012; http://ngambaisland.com/ngamba_news/news/?page_id=552

A publication arising from workshop proceedings in DOHA for UNFCC where Maryanne G-Gran of IIED and Byamukama Biryahwaho of NAHI participated <http://pubs.iied.org/G03560.html>

Katoomba Group Ecosystem Market Place E-Newsletter featured story on payment to forest owners in September 2012

http://www.ecosystemmarketplace.com/pages/dynamic/newsletter.page.php?page_id=9310§ion=newsletters&eod=1

National Media

Story on Payments to PFOs;

<http://mobile.monitor.co.ug/News/Bunyoro+forest+owners+paid+in+conservation+campaign+/-/691252/1606350/-/format/xhtml/-/xatuyq/-/index.html>

The first draft of the communication strategy was done by the PMU, but based on comments from the Project Steering Committee it was revised.

International Presentations

-Mainstreaming Biodiversity and Development project ; NBSAPs 2 in Entebbe, July 2013;

<http://povertyandconservation.info/sites/default/files/A%20TOOL%20FOR%20MAINSTREAMING%20BIODIVERSITY%20CONSERVATION%20Paul%20Hatanga.pdf>

-Zoos and Aquariums Committing to Conservation in July 2013; <http://www.youtube.com/watch?v=bHpQOuY3Qzw>

-Innovations for Equity in Small Holder PES; March 2014 <http://www.slideee.com/slide/the-chimpanzee-conservation-corridor-pilot-pes-scheme-in-uganda>

-Yale University Forests as Capital Conference and Innovations Prize; <http://forestsascapital-istf.sites.yale.edu/istf-innovation-prize-forest-finance-edition>

Apes Across Africa, May 2014, In Fortportal, Uganda.

National Presentations include;

-Presentation at Inception workshop of WWF project on Sustainable Financing of Rwenzori National Park by Lilly Ajarova Early June 2014.

-Presentations at National Technical Steering Committee meeting in December 2013 in Kampala and at Project Steering Committee meeting in October 2014 in Hoima.

The project has featured in annual reports;

-IIEDs annual report 2013 <http://pubs.iied.org/pdfs/G03672.pdf#page=15>

-Chimpanzee Trust (PMU) annual report 2013; <http://ngambaisland.com/wp-content/uploads/2013/08/Annual-report-2013.pdf>

From Final Report

B. Articles, Publications & Newsletters. The project featured in the following;

Forest Trends & Katoomba Group;

- http://www.forest-trends.org/publication_details.php?publicationID=3015
- http://www.ecosystemmarketplace.com/pages/dynamic/newsletter.page.php?page_id=8392§ion=home
- http://www.ecosystemmarketplace.com/pages/dynamic/article.page.php?page_id=8408§ion=home
- http://www.ecosystemmarketplace.com/pages/dynamic/newsletter.page.php?page_id=9310§ion=newsletters&eod=1

CSWCT reports and blog posts featured the project;

- http://myemail.constantcontact.com/CSWCT-August-News-Bulletin.html?soid=1109765653620&aid=_7iM16z80jc
- <http://ngambaisland.com/about-cswct/annual-reports/>
- http://ngambaisland.com/wp-content/uploads/2013/08/First_PES_News_letter_update_June_2011.pdf
- <http://cswctfieldconservation.blogspot.com/>

In NEMA and government of Uganda platforms and newsletters

- NEMA Newsletter; http://www.nemaug.org/reports/June_2012_newsletter.pdf
- On national clearing house mechanism

http://chm.nemaug.org/index.php?option=com_content&view=article&id=106&Itemid=12&lang=en

- Featured in the achievements section of the Wildlife Conservation under the Ministry of Tourism, Wildlife and Antiquities; http://tourism.go.ug/index.php?option=com_content&view=article&id=30&Itemid=281
- Ministry of Water and Environment, Water and Environment Sector Performance report 2013; http://www.mwe.go.ug/index.php?option=com_docman&task=cat_view&gid=15&Itemid=223

IIED; the project featured in the following;

- Darwin & IIED Reports and newsletters; <http://www.darwininitiative.org.uk/documents/18012/21826/18-012%20HY1%20revised.pdf>
- <http://www.iied.org/annual-report-201213-sharing-learning-for-change>
- <http://darwin.defra.gov.uk/newsletter/Darwin%20News%202012-02.pdf>
- A publication arising from workshop proceedings in DOHA during UNFCCC COP where Maryanne G-Gran of IIED and Byamukama Biryahwaho of NAHI participated <http://pubs.iied.org/G03560.html>

IPA, NAHI and International Scientists;

- Publication on Liquidity constraints and deforestation in PES http://faculty.wcas.northwestern.edu/~sjv340/liquidity_pes.pdf
- <https://www.climate-eval.org/blog/evaluating-payments-ecosystem-services-program-uganda>

Presentations in National and International Conferences

- Innovations for Equity in Smallholder PES; Edinburgh UK; <http://www.slideshare.net/IIEDslides/session-1-3rd-presentation-paul-hatanga>

- Second Regional Workshop on NBSAPs; http://povertyandconservation.info/sites/default/files/A%20TOOL%20FOR%20MAINSTREAMING%20BIODIVERSITY%20CONSERVATION_%20P%20a%20Hatanga.pdf
- At Evaluation Week organized by Uganda's Office of Prime Minister; <http://gef.opm.go.ug/wp-content/uploads/2013/04/PES-Project-Evaluation-Week1.pdf> and <http://gef.opm.go.ug/wp-content/uploads/2013/04/Presentation-on-Evaluation-study-funded-by-3ie-in-Uganda-March-2013-Evaluation-Week.pdf>
- Regional Workshop on Resource Mobilization by CBD & UNDP; <http://www.cbd.int/doc/?meeting=5339>
- -Zoos and Aquariums Committing to Conservation in July 2013; <http://www.youtube.com/watch?v=bHpQOuY3Qzw>
- -Yale University Forests as Capital Conference and Innovations Prize; <http://forestsascapital-istf.sites.yale.edu/istf-innovation-prize-forest-finance-edition>
- Apes Across Africa, May 2014, In Fortportal, Uganda.
- Presentation at Inception workshop of WWF project on Sustainable Financing of Rwenzori National Park by Lilly Ajarova Early June 2014. D. Media
- <http://www.monitor.co.ug/News/National/-/688334/1319352/-/b1bum5z/-/index.html>, <http://www.monitor.co.ug/News/National/-/688334/1269968/-/bhbr5iz/-/index.html>
- <http://www.sunrise.ug/news/top-stories/3530-plan-to-lure-villagers-to-protect-forests.html>
- Story on Payments to PFOs; <http://mobile.monitor.co.ug/News/Bunyoro+forest+owners+paid+in+conservation+campaign+/-/691252/1606350/-/format/xhtml/-/xatuyq/-/index.html>

NOTES ON HOW THE PAYMENT LEVEL WAS CALCULATED

(From MTR report (2013), contributed by Maryanne Grieg-Gran, IIED with some editing)

Supply side: The willingness to accept or the amount required to compensate PFOs per ha of forest for what they lose by joining the PES scheme will vary between PFOs depending on their location (access to market), land fertility, perceptions of risk, quality of their remaining forest, and other factors. So there is not one single cost but a cost curve. The higher the payment offered, the more PFOs will want to join the scheme. It was not possible to do the estimation of this cost curve before consultations began with the PFOs about the design of the PES scheme. In order to do these consultations it was necessary to give PFOs some preliminary information about the amount of payment they could expect. This was also an opportunity to gauge their reaction to the suggested payment level. The suggested UGS 70,000 per ha arose from IPA's preliminary socioeconomic research. IPA undertook did some interviews with individual PFOs and asked about the frequency of tree cutting and the amount that logs could be sold for. They estimated opportunity costs at UGX 55,000 per ha based mainly on what PFOs could get from selling logs and considered that UGX 80,000 per ha would give the extra margin necessary beyond opportunity costs. Before the first consultation it was agreed between partners that there was scope to be a bit more conservative and it was agreed to offer UGX 70,000 per ha as the ceiling. In the first four consultations, the reaction of PFOs to the payment level was mostly positive, although there were some who considered it to be too low. The concern was to avoid offering more than could be available from long-term sources of finance – at the time the main possibility seemed to be the voluntary market for carbon. It was suggested that if insufficient PFOs joined the scheme the payment level could be raised later provided this was within market constraints; if the original payment level was too high, it would be difficult to lower it subsequently – having raised landowner expectations.

Demand side: After the first four consultations, a quick analysis was conducted on the market side, looking at prices in the voluntary market, estimates of carbon stocks in the area, making assumptions about emissions discounts for leakage and a lack of permanence and transaction costs. The analysis focused on carbon as this was the most likely source of revenue. The analysis concluded that UGX 70,000 per ha was just about feasible with the range of carbon prices at the time, and that a higher payment level would have been unwise if the intention was to finance this from selling carbon emission reductions in the voluntary market. A challenge for the PES scheme and also for the landscape level REDD+ project currently under development is that the forests in the area have relatively low carbon stocks, even the so-called intact forests. This was not appreciated at the time the Project was developed.