GEF EO Terminal Evaluation Review Form

1. PROJECT DATA				
			Review date:	February 2011
GEF Project ID:	1330 MSP		at endorsement (Million US$)	at completion (Million US$)
IA/EA Project ID:	P076778 (WB)	**GEF financing:**	747,000	747,000
Project Name:	Sustainable Land Management in the Zambian Miombo Woodland Ecosystem	IA/EA own:	0.0	0.0
Country:	Zambia	Government:	253,000	253,000
		Other*:	350,000	350,000
		Total Cofinancing	603,000	603,000
Operational Program:	Multi Focal Area: OP#12: Integrated Ecosystem Management	**Total Project Cost:**	1,350,000	1,350,000
IA	World Bank	Dates		
Partners involved:	Republic of Zambia's Ministry of Agriculture and Cooperatives	Effectiveness/ Prodoc Signature (i.e. date project began)		May 2002
		Closing Date	Proposed: May 2006	Actual: May 2008
TER Prepared by: Oreste Maia-Andrade	TER peer reviewed by:	Duration between effectiveness date and original closing (in months): 48 months	Duration between effectiveness date and actual closing (in months): 72 months	Difference between original and actual closing (in months): 24 months
Author of TE: Alex Mwanakasale		TE completion date: Not informed	TE submission date to GEF EO: August 2010	Difference between TE completion and submission date (in months): Unable to calculate

* Other is referred to contributions mobilized for the project from other multilateral agencies, bilateral development cooperation agencies, NGOs, the private sector and beneficiaries.

2. SUMMARY OF PROJECT RATINGS AND KEY FINDINGS

Please refer to document GEF Office of Evaluation Guidelines for terminal evaluation reviews for further definitions of the ratings.

Performance Dimension	Last PIR	IA Terminal Evaluation	IA Evaluation Office evaluations or reviews*	GEF EO
2.1a Project outcomes	MS	MS	S	MS
2.1b Sustainability of Outcomes	N/A	U	MU	U
2.1c Monitoring and evaluation	MU	Poor	Adequate	MS
2.1d Quality of implementation and Execution	N/A	N/A	N/A	S
2.1e Quality of the evaluation report	N/A	N/A	N/A	MS

*Rates refer to the MTR

2.2 Should the terminal evaluation report for this project be considered a good practice? Why?

The Implementation Completion Memorandum (ICM or TE) should be considered a good practice only partially.

- The report fails to explain the reasons behind why most farmers, even having gained the necessary knowledge not to practice the so-called *chitemene* (slash-and-burn system) any longer, remain practicing *chitemene* (beyond reasons of tradition and familiarity) and why the ones that have adopted new techniques

might return to *chitemene*.

- Although most of the ICM sections have been well explained and substantially rated, the document provides almost no information on M&E, which were analyzed in this Review through the Project Appraisal Document (PAD) submitted for CEO Endorsement and the Mid-Term Review.
- Although some financial resources could have been planned to be used in future monitoring or institutional assistance to farmers, nothing has been done in that regard, and the ICM simply affirms that this issue is not applicable to the project.

2.3 Are there any evaluation findings that require follow-up, such as corruption, reallocation of GEF funds, mismanagement, etc.?

No such findings were noted in the ICM.

3. PROJECT OBJECTIVES

3.1 Project Objectives

a. What were the Global Environmental Objectives of the project? Were there any changes during implementation?

According to the PAD submitted for CEO Endorsement:

- "The goals of the proposed project are: (i) a *reduction of carbon emissions* from unsustainable slash-and-burn agricultural practices in the Miombo woodlands; (ii) the conservation of globally significant biodiversity; and (iii) *improvement of the food security* of the local population. In order to achieve these goals, the project will promote a shift in land management from the *chitemene* (system of slash and burn agriculture currently practiced throughout northern Zambia) to a sustainable land management system, based upon integrated ecosystem management (IEM) and conservation farming (CF) principles."
- "The specific objectives of the project are to: (i) identify and assess the applicability of potential IEM and CF techniques; (ii) build local and national capacity in sustainable land management; (iii) facilitate a shift from *chitemene* to sustainable land management practices in selected pilot areas within the Miombo woodlands; and (iv) extend the experiences gained with sustainable land management to other areas with a comparable agro-ecological environment, both in Zambia and in neighbouring countries."

No changes were noted in the ICM.

b. What were the Development Objectives of the project? Were there any changes during implementation? (describe and insert tick in appropriate box below, if yes at what level was the change approved (GEFSEC, IA or EA)?)

According to the PAD submitted for CEO Endorsement:

- The project has five components: (i) supporting studies; (ii) capacity building; (iii) promotion of sustainable land management in Mkushi and Serenje districts; (iv) scaling-up of the sustainable land management approach to other areas in Zambia; and (v) project management, monitoring and evaluation, and information dissemination. The project will be implemented over a four-year period.

A change has been noted in the ICM:

- Component (v) was suppressed in the ICM, which states that the project had then (only) "four components", and basically rephrased the fifth component into an explanatory sentence: "The project was managed through a project management unit also responsible for monitoring and evaluation and, information dissemination."

Overall Environmental Objectives	Project Development Objectives	Project Components	Any other (specify)
		X	

c. If yes, tick applicable reasons for the change (in global environmental objectives and/or development objectives)

Original objectives not sufficiently articulated	Exogenous conditions changed, due to which a change in objectives was needed	Project was restructured because original objectives were over ambitious	Project was restructured because of lack of progress	Any other (specify)

				No explanation was provided for the change

4. GEF EVALUATION OFFICE ASSESSMENT OF OUTCOMES AND SUSTAINABILITY

4.1.1 Outcomes (Relevance can receive either a satisfactory rating or a unsatisfactory rating. For effectiveness and cost efficiency a six point scale 6= HS to 1 = HU will be used)

a. Relevance **Rating: 5**

Satisfactory:

- According to the ICM, "one of the goals of the project was the improvement of the food security of the local population. In order to achieve this and other goals, the project was expected to promote a shift in land management from the currently practiced *chitemene* system to a sustainable land management system, based upon IEM and CF principles. This in turn would raise the productivity of smallholder farmers. This objective ties with the Government's Fifth National Development Plan objective of reducing poverty and achieving growth by raising the productivity of smallholder farmers through appropriate technologies such as conservation farming."
- Considering the direct importance of these outcomes for the achievement of project's specific goals, objectives and components, as well as their solid consistence with IEM and CF principles, project relevance is rated as satisfactory.

b. Effectiveness **Rating: 4**

Moderately Satisfactory:

- According to the ICM, "the project was expected to contribute to a reduction of carbon emissions by inducing a change from unsustainable slash-and-burn (*chitemene*) agricultural practices in the Miombo woodlands to conservation farming practices […]. The project was also supposed to improve the food security of the local population. The project has trained smallholder farmers in conservation farming practices and provided them with incentives to adopt the practices. The project also trained extension staff in CF technologies, carried out experimental trials for these technologies and encouraged the scaled up of the most promising technologies. Most farmers interviewed at the end of the project were happy with the knowledge on CF and liming, which they had gained from the project through Farmer Field Schools. They thought this was the biggest asset they were going to remain with as the project reached the end. This demonstrated the effectiveness of the participatory extension activities employed by the project."
- To the ICM, however, "empirical data show that only 400 hectares were under conservation farming compared to a target of 6,000. There is a difference between what the farmers claimed to have been taught and what they were practicing in their fields ranging between 21 percent for planting basins to 46 percent for liming. It is expected that there will be a time lag between the farmers' appreciation of CF principles and application and adoption of CF when actual benefits accrue to the farmers. The fact is that most farmers hesitate to implement CF due to risk aversion while at the same time the CF methods of land management need time to take effect."
- Therefore, project outcomes were not much commensurate with the expected outcomes as described in the PAD, considering the low applicability of knowledge gained, the project effectiveness is rated moderately satisfactory.

c. Efficiency (cost-effectiveness) **Rating: 3**

Moderately Unsatisfactory:

- In the words of the ICM, "an economic and financial analysis was not done for this project. The project was under implementation between October 2002 and May 2006 and benefited from two extensions of closing dates. The project was therefore under implementation for 5 years 7 months. This is not unexpected because the adoption of new technologies by farmers requires time to be firmly anchored in the farming systems of smallholder farmers. The project was expected to have global benefits by way of carbon sequestration and protection of biodiversity. The total carbon that was expected to be sequestered was estimated at 958,000 tons with a total value of US$4,790,000 (at $5 per ton of carbon sequestered)."
- According to the ICM, "assuming that farmers who declared to have started practicing CF in their fields, giving up slash and burn, each farmer using 28 ha of woodlands over a twenty year period and raising the cultivated area instantly to 2 ha, a total of 1,199,000 tons of carbon would be sequestered. This would represent a benefit value of US$5,995,000". In despite of the few achievements and the explanations provided by the ICM, the full expected financing and co-financing were provided, along with the mentioned

extension of time, but the project has not achieved even a fourth of its expected goal, and it is not possible to predict whether adoption of CF technologies will be sustained over the twenty-year period. Therefore, cost-effectiveness cannot be rated higher than moderately unsatisfactory.

4.2 Likelihood of sustainability. Using the following sustainability criteria, include an assessment of **risks** to sustainability of project outcomes and impacts based on the information presented in the TE. Use a four point scale (4= Likely (no or negligible risk); 3= Moderately Likely (low risk); 2= Moderately Unlikely (substantial risks) to 1= Unlikely (High risk)). The ratings should be given taking into account both the probability of a risk materializing and the anticipated magnitude of its effect on the continuance of project benefits.

a. Financial resources **Rating: 1**

Unlikely:

- The ICM understands that risk to development outcome with regard to "Follow-On Results and/or Investment Activities" is not applicable. However, there are no financial resources expected to ensure that farmers keep and increase the use of new techniques in substitution to *chitemene*, the project's financial sustainability is unlikely.

b. Socio political **Rating: 1**

Unlikely:

- According to the ICM, "although farmers have learnt the conservation farming techniques and the benefits of liming, the adoption rates have been low with only 400 ha under CF out of a target of 6,000 ha. The Trust Fund activities are unlikely to be sustained for much longer as farmers will fall back to [methods] that they are most familiar with. However, through continuous experimentation, it is likely that the farmers could improve the technologies to derive greater benefits." Therefore, with regard to social, political and technological aspects, sustainability is unlikely.

c. Institutional framework and governance **Rating: 1**

Unlikely:

- The ICM does not mention any improvement with regard to institutional framework and governance. At least, a continuous monitoring/institutional unit could have been planned/implemented by the Zambian government. Since no measures were taken, institutional framework and governance's sustainability is rated as unlikely.

d. Environmental **Rating: 2**

Moderately Unlikely:

- According to the ICM, "biodiversity improvements from reduced *chitemene* are obvious and this is expected from this project. The other substantial biodiversity impact was expected from the application of IEM principles. Unfortunately training of extension workers in IEM was late. In the first two years of the project, very little IEM was practiced in FFSs. In the past two years there has been a deliberate move to establish more IEM FFSs. IEM puts emphasis on non-timber forest products (NTFP) including bee keeping, mushroom and fruit-harvesting. Bee keeping was there right from the beginning of the project but the number of beehives seem to have increased with growing interest from the farmers. According to the 2007 Annual Project report, in Mkushi there were 37 IEM FFSs while in Serenje there were only 6 IEM FFSs. The type of activities was livelihood activities that were to reduce the overdependence by communities on natural resources. The main areas of concern were catchment protection, forest protection and the protection of wild life. Farmers themselves were investing in goat rearing, chickens and other items."
- All these efforts are expected to have a positive and sustained impact on biodiversity. This is indicative of a certain sustainability of these activities. However, considering that *chitemene* continues to be practiced by farmer because of convenience reasons, the project's environmental sustainability is rated no higher than moderately unlikely.

4.3 Assessment of processes and factors affecting attainment of project outcomes and sustainability.

a. Co-financing. To what extent was the reported cofinancing (or proposed cofinancing) essential to achievement of GEF objectives? Were components supported by cofinancing well integrated into the project? If there was a difference in the level of expected co-financing and actual co-financing, then what were the reasons for it? Did the extent of materialization of co-financing affect project's outcomes and/or sustainability? If it did, then in what ways and through

what causal linkages?

The ICM explains that the anticipated cofinancing did not take place:

- According to the ICM, "the anticipated co-financing from ASIP (IDA project) of $350,000 did not take place. It was expected that a follow-on project would be prepared and become effective shortly after the closure of ASIP I in December 2001. A follow-on project was never agreed and prepared. Therefore the necessary funding to extension to facilitate promotion of sustainable land management and scaling up of these activities in other Miombo woodland areas was not there. Limited funds were available from government and this hampered efforts to carry out these activities."
- By referring to replication, the ICM mentions that "the project was designed with hindsight that funds for replication in the third and fourth years would come from co-financing from an IDA credit which had a national coverage. However, a follow on project to the Agricultural Sector Investment Project (1996-2001) did not take place and when it eventually did years later, it did not have a component to support the scale up activities."
- Despite the complaints mentioned in the ICM, the reported actual co-financing equaled the expected co-financing. So, although lack of additional co-financing might have hindered the full achievement of project goals, the expected co-financing at entry was eventually provided and other reasons should be looked at for explaining occasional problems with project implementation/execution.

b. Delays. If there were delays in project implementation and completion, then what were the reasons for it? Did the delay affect the project's outcomes and/or sustainability? If it did, then in what ways and through what causal linkages?

The only mention to delay in the whole ICM refers to replication:

- According to the ICM, replication was compromised, among other reasons, because of "repeated delays in capacity building." No further explanation is provided by the ICM.

c. Country Ownership. Assess the extent to which country ownership has affected project outcomes and sustainability? Describe the ways in which it affected outcomes and sustainability highlighting the causal links.

A relatively committed engagement of the Zambian government was noted:

- Although part of the governmental staff also needed to be trained and governmental funds have been delayed for capacity building purposes, the actual involvement of the government of Zambia as executor, along with its (delayed) provision of cofinancing, demonstrate at least a certain degree of country ownership.

4.4 Assessment of the project's monitoring and evaluation system based on the information in the TE

a. M&E design at Entry **Rating (six point scale): 5**

Satisfactory:

- According to the PAD submitted for CEO Endorsement, "project monitoring and evaluation will be carried out at two levels: the field level and the project level. In the first session of the Farm Field School (FFS), the participants will be asked to provide the following information: number of participants, names of the participants, gender, area under cultivation, crops grown, and expectations of the participants regarding the FFS. At the last session of the FFS, farmers will evaluate if the FFS has fulfilled their expectations, positive and negative aspects of the FFS, their opinion about options for and constraint to CF and IEM, and their intended use of CF and IEM in the subsequent year. In addition, the number of participants following the FFS to the end will be recorded. In the subsequent years, the extension officer will, during one of his/her follow-up visits, record the actual amount of farmers practising CF, the actual area under CF and the implementation of community-based IEM activities. For each FFS, a record will be held in the district project office."
- In the PAD words, "at the project level, the following indicators will be monitored: (i) total number of FFS facilitators trained; (ii) number of FFS conducted; (iii) number of farmers trained; (iv) percentage of female farmers trained; (v) number of farmers having started CF; (vi) hectares cultivated with CF; (vii) number of communities that have taken up IEM; and (viii) grants disbursed to farmers. This will be a continuous activity, to be implemented by the project manager. He/she will have a separate budget for monitoring activities."
- As per the PAD, "the budget also includes provisions for the mid-term review and ex-post evaluation of the project. Mid-term review will be undertaken by an international consultant (two months). It will include an assessment of the progress of the project, and in particular of the effectiveness of the CF, IEM and FFS activities. The consultant will provide general technical backstopping, and will provide recommendations for project implementation in years three and four. In addition, a preliminary estimate will be made of the impact

on carbon sequestration and biodiversity conservation[1]. The mid-term review would overlap with the organisation of the sustainable land management workshop (Activity D2). The ex-post evaluation will also be done by an international consultant with experience in CF, IEM and participatory extension through FFS, and will result in a final evaluation of the achievements of the project, including an analysis of the environmental and food security benefits, as well as recommendations for further scaling up of the sustainable land management approach."

- Considering that M&E plan at entry contained SMART indicators and a sound data analysis system to appropriately monitor results and track progress towards achieving project objectives, M&E design is rated as satisfactory.

b. M&E plan Implementation Rating (six point scale): 2

Moderately Unsatisfactory:

- The ICM (TE) does not comment much about M&E, stating a laconic sentence: "The project was managed through a project management unit also responsible for monitoring and evaluation and, information dissemination". The ICM also mentions that "replication was compromised […] above all [by] poor execution of M&E at the project management level", but the document does not provide further explanation on that.
- The January 2006 Mid-Term Review Report provides a comprehensive, descriptive explanation of how the M&E system has been implemented. "The Implementation consultant suggested a factorial approach using four plots per crop, a minimum of three crops, and two plots for agroforestry. The results, agronomic data and participation level have been documented and discussed at the field level by each FFS group and BEO or CEO. Thus crucial quantitative agronomic input- and output-, as well as participation level data become available during each FFS cropping season. The data should provide a solid basis to monitoring and evaluation of the learning cycle."
- Commenting on survey results and agronomic data gathered by the FFSs and M&E extension staff, the MTR affirms that "the major objective was to gather information on the state of the participatory M&E process of FFSs, extension staff and district management. To this end a number of questionnaires were designed. During each visit the FFS group was firstly asked to provide data on membership, local farm practices, acquired CF knowledge, perceived advantages of the CF practices, and field experimental data. Subsequently two volunteer farmers were interviewed to learn about farmer knowledge and confidence in applying CF and other techniques on their fields. In addition the facilitating extension officer was interviewed with the aim of measuring the impact by the estimation of area under CF in the camp by FFS and non-FFS farmers. The subsequent analysis of the produced agronomic and impact data sets enabled the evaluation of the project progress against the expected outcomes."
- To the MTR, "it is satisfying to note that most interviewed farmers attributed their better understanding of the use of lime and CF principles to this project. This once again demonstrates the effectiveness of the participatory extension activities employed by the project. Obviously, there will be a lag time between the farmers' appreciation of CF principles and application and adoption of CF when actual benefits accrue to the farmers. The reasons for this are that most farmers hesitate to implement CF due to risk aversion while the CF methods of land management need time to take effect."
- Despite the positive analysis of the M&E system by the MTR, explaining that the M&E had an implementation consultant, and that the FFSs and the extension staff played an important role in collecting the M&E information, this information reflects only what happened until January 2006. Information from then on is impossible to be assessed since the ICM is laconic with regard to M&E. Considering also the shortcomings mentioned in the ICM, M&E implementation is rated as no higher than moderately unsatisfactory.

4.6 Assessment of Quality of Implementation and Execution

a. Overall Quality of Implementation and Execution (on a six point scale): 5

b. Overall Quality of Implementation – for IA (on a six point scale): 5

Briefly describe and assess performance on issues such as quality of the project design, focus on results, adequacy of supervision inputs and processes, quality of risk management, candor and realism in supervision reporting, and suitability of the chosen executing agencies for project execution.

Satisfactory:

- All the ICM mentions is that "Bank performance is rated satisfactory. Formal supervision missions were held

[1] MAFF will also explore the possible interest of universities and research institutes in using the project area to develop improved tools for monitoring carbon storage at the ecosystem level.

every six months [and this was complemented] by the TTL's constant contact with the project staff and other sectorial clients. The missions included experienced operational and fiduciary staff. Each aide memoire had an annex of agreed action and next steps. This was designed to help project team to easily follow up agreed actions."

- Considering that project design, focus on results, adequacy of supervision inputs and processes, quality of risk management were all apparently met criteria, and since no shortcomings were noted in Bank performance, quality of implementation is rated as satisfactory.

c. Quality of Execution – for Executing Agencies[2] (rating on a 6 point scale): 4

Briefly describe and assess performance on issues such as focus on results, adequacy of management inputs and processes, quality of risk management, and candor and realism in reporting by the executive agency.

Moderately Satisfactory:

- According to the ICM, "the recipient (government of Zambia) executed the activities well. Supporting studies were all successfully completed, training of trainers was completed while training of other staff was successful. Targeted research was carried out successfully and the most appropriate technologies and agronomic practices were recommended. The target number of farmer field schools and farmers attending these schools was mostly met. However, adoption rates were low because of reasons beyond the recipient's control. Ecosystem management was not given as much attention as conservation farming largely because of the skills bias of the extension workers. It was difficult to implement the matching grant sub-component because the farmers were not able to raise the matching contribution. Scaling up of the project activities in other similar ecosystems was not possible because of lack of resources."
- To the MTR, issued in January 2006, when the Government of Zambia had still not provided the promised cofinancing, the assessment of project management was: "The management of the project pointed to a number of issues that have affected project progress: (i) extension officer vacancies at the camp level hamper F.FS facilitating and M&E, (ii) counter part funding has so far not been provided by the GRZ due to the priority to qualify for HIPC, (iii) delays in procurement of goods and services have compromised progress, in particular regarding the appointment of the master trainers, (iv) late disbursement of funds trough the FMU prevented scheduled tasks to be executed in time."
- Therefore, since some shortcomings were noticed in the government of Zambia's performance, quality of execution is rated as moderately satisfactory.

5. PROGRESS TOWARDS IMPACT

a. What is the *outlined* outcomes-to-impact pathway?

Briefly describe the logical sequence of means-to-end linkages underlying a project (Outcome to impact pathways are the means-ends relationships between project outcomes and the intended impacts – i.e. the logical results chain of activity, output, outcome and impact)

Activities	Outputs	Outcomes	Intermediary States	Impacts / GEB
To support studies To promote capacity building To promote sustainable land management in Mkushi and Serenje districts	Farmers have learnt the conservation farming techniques and the benefits of liming Positive capacity building impact,	A total of 1,199,000 tons of carbon would be sequestered over the 20-year period from the start of the project 400 ha are now under Integrated Ecosystem Management (IEM) and Conservation Farming (CF) principles, no longer practicing *chitemene*	Through continuous experimentation, it is likely that the farmers could improve the technologies to derive greater benefits	Reduction of carbon emissions from unsustainable *chitemene* in the Miombo woodlands Conservation of globally significant

[2] Executing Agencies for this section would mean those agencies that are executing the project in the field. For any given project this will exclude Executing Agencies that are implementing the project under expanded opportunities – for projects approved under the expanded opportunities procedure the respective executing agency will be treated as an implementing agency.

To scale-up the sustainable land management approach to other areas in Zambia and even abroad	with theoretical workshops and practical trainings in Northern Zambia	The combined analysis of the food situation in Mkushi and Serenje for the 2004/05, 2005/06 and 2006/07 seasons shows that 64% percent of farmers said they had more than enough food for their home consumption and 24% said they had enough food		biodiversity Improvement of the food security of the local population

b. What are the actual (*intended or unintended)* impacts of the project?

Based on the assessment of outcomes [4.1.1] explain to what extent the project contributed to or detracted from the path to project impacts and to *impact drivers* (Impact drivers are the ***significant factors*** that, if present, are expected to contribute to the ultimate realization of project impacts and that are within the ability of the project to influence

Considering the assessed outcomes and presented impacts, it is inferable from this project that impact drivers were:

- **Capacity Building through the Farmer Field School (FFS)** → led to reduction of carbon emissions: The Farmer Field School (FFS) played a fundamental role in the project, having carried out a survey at the end of the project that point to a shift towards reducing the practice of slash-and-burn (*chitemene*) in some of the agricultural camps. The question as to which factors promote the adoption and to what extent remains a difficult one. Two polar extremes seem to develop in the region. On the one side, 30% of the sampled camps FFS claimed that the practice of *chitemene* has already come to an end in their camp. This was the case in 3 agricultural camps of the Mulembo block in Serenje, and 6 FFS in the Mkushi district. This situation occurs where population densities surpass sustainability levels that have led to a collapse of the system. In other words, farmers move to permanent fields- much less extensive farming systems almost by default. The natural growth of the population seems to enforce the polarity. In addition, settlers from outside the districts are reported to increase in numbers, and these will move to yet unclaimed land. This brings up the issues of "additionality" and "leakage". In short, additionality requires that mitigation is a result of the project, in cases where mitigation already occurs there is no real emission mitigation over the "business as usual" situation. Leakage occurs through activity shift, e.g. the project causes deforestation outside the project area. Assuming that farmers who declared to have started applying CF in their own fields, giving up *chitemene*, each farmer using 28 ha of woodlands and raising the cultivated area instantly to 2 ha, a total of 1,199,000 tons Carbon would be sequestered over the 20 year period from the start of the project.
- **Capacity Building through the Farmer Field School (FFS)** → led to project impact on food security: Most FFS farmers appreciated the knowledge they obtained through the project. When asked to give evidence of the better ways of farming they had learned, they talked about higher yields. The combined analysis of the food situation in Mkushi and Serenje for the 2004/05, 2005/06 and 2006/07 seasons shows that 64% percent said they had more than enough food for their home consumption and 24% said they had enough food. This is in agreement with 90% of the extension officers who said they were of the opinion that the farmers they worked with had enough food. In the 2004/5 season, the farmers did not have enough food mainly because of the drought in that year.
- **Community involvement** → led to project impact on biodiversity: The benefits from reduced *chitemene*, in terms of biodiversity improvements are obvious and this is expected from this project. The other substantial biodiversity impact was expected from the application of IEM principles. Unfortunately training of extension workers in IEM was late. In the first two years of the project, very little IEM was practiced in FFSs. In the past two years there has been a deliberate move to establish more IEM FFSs. IEM puts emphasis on non-timber forest products (NTFP) including bee keeping, mushroom and fruit-harvesting. Bee keeping was there right from the beginning of the project but the number of beehives seem to have increased with growing interest from farmers. According to the 2007 Annual Project Report, there were 37 IEM FFSs in Mkushi while only 6 IEM FFSs in Serenje. The types of activities taking place were livelihood activities, which were to reduce the overdependence by communities on natural resources. The main areas of concern were catchment protection, forest protection and the protection of wild life in the GMAs. All these efforts are expected to have a positive impact on biodiversity. Farmers themselves were investing in goat rearing, chickens and other items. This is indicative of the sustainability of these activities.

c. Drawing on the assessment of the likelihood of outcome sustainability [4.2], what are the apparent risks to achieved impacts being sustained and likely impacts being achieved?

Considering the assessed likelihood of outcome sustainability, it is inferable from this project that the apparent risks to impacts were:

- **Low adoption of new practices**: According to the ICM, "although farmers have learnt the conservation

farming techniques and the benefits of liming, the adoption rates have been low with only 400 ha under CF out of a target of 6,000 ha. The Trust Fund activities are unlikely to be sustained for much longer as farmers will fall back to [methods] that they are most familiar with. However, through continuous experimentation, it is likely that the farmers could improve the technologies to derive greater benefits." Therefore, with regard to social, political and technological aspects, sustainability is unlikely.

- **Lack of institutional framework**: The ICM does not mention any improvement with regard to institutional framework and governance, which leads to an unlikely sustainability in that aspect.

d. **Evidence of Impact**

Question	**Yes**	**No**	**UA**
i. Did the evaluation report on ***stress reduction***[3] at the local level (i.e. at the demonstration-pilot level, etc)?	X		
ii. If yes, describe the evidence that was provided whenever possible quoting quantitative evidence. Also discuss the scope[4] of such reductions given the range of concerns targeted by the project. Yes: • According to the ICM, farmers have learnt the conservation farming techniques and the benefits of liming, even though the adoption rates have been low with only 400 ha under CF out of a target of 6,000 ha. Even if Trust Fund activities are unlikely to be sustained for much longer as farmers will fall back to technologies that they are most familiar with, it is actually possible that, through continuous experimentation, farmers could improve the technologies to derive greater benefits.			
iii. Did the evaluation report stress reduction at the broader systemic level?		X	
iv. If yes, describe the evidence that was provided whenever possible quoting quantitative evidence. Also discuss the scope of such reductions given the range of concerns targeted by the project.			
v. Did the evaluation report change in the ***environmental status*** at the local level (i.e. at the demonstration - pilot level, etc)		X	
vi. If yes, describe the evidence that was provided whenever possible quoting quantitative evidence. Also discuss the scope of change given the range of concerns targeted by the project.			
vii. Did the evaluation report change in the environmental status at the broader systemic level?		X	
viii. If yes, describe the evidence that was provided whenever possible quoting quantitative evidence. Also discuss the scope of such change given the range of concerns targeted by the project.			
ix. Did the evaluation report change in the socioeconomic status at the local level?		X	
x. If yes, describe the evidence that was provided whenever possible quoting quantitative evidence. Also discuss the scope of change given the range of concerns targeted by the project.			
xi. Did the evaluation report change in the socio-economic status at the systemic level?		X	
xii. If yes, describe the evidence that was provided whenever possible quoting quantitative evidence. Also discuss the scope of change given the range of concerns targeted by the project.			
xiii. Did the evaluation provide evidence of any negative impacts (on drivers toward the projects intended impact, environmental status, socioeconomic status)? Describe the impacts that were documented and how severe were these impacts? No negative impacts were reported in the ICM.			
e. Monitoring of impacts			
i. Are arrangements/institutions in place to monitor stress reduction/improvement in the environment and/or socio-economic conditions at the local level after project completion?		X	
ii. Are arrangements/institutions in place to monitor stress reduction/improvement in the environment and/or socio-economic conditions at the systemic level after project completion?		X	

6. LESSONS AND RECOMMENDATIONS

Assess the project lessons and recommendations as described in the TE

[3] Stress = Pressure on the environment caused by human activities; Reduction=decrease of this pressure
[4] Scope refers to the broadness of results against original objectives,

a. Briefly describe the key lessons, good practice or approaches mentioned in the terminal evaluation report that could have application for other GEF projects

The key lessons, good practices and approaches provided by the TE are fused with its recommendations:

- Farmer Field Schools proved an effective participatory learning method for farmers to acquire knowledge and experience in new farming technologies. Farmers are able to grasp the lessons clearly. However, this is not enough for adoption. Adoption appears to require sustained effort of MACO to facilitate timely inputs when markets are not efficient;
- Farmers who have been more exposed in life are able to start practicing what they have learned faster than those who are less exposed. Such farmers could be used effectively as lead farmers;
- Important factors affecting technology uptake are: availability of implements and inputs associated with the technology, failure to demonstrate higher yields with the new technology, agronomic difficulties faced on application of new technology (e.g. more weeds in CF fields for the first few years), and the socio-economic setting of the farmer. The implements and inputs associated with a particular technology must be made available;
- When incentives to the facilitators lead to increased numbers of FFSs it might affect the quality of the FFS learning cycle.
- It is difficult to understand adoption of new technologies in the absence of proper economic and financial analysis.

b. Briefly describe the recommendations given in the terminal evaluation

The recommendations were fused with key lessons, good practices and approaches provided by the TE. See section above.

7. QUALITY OF THE TERMINAL EVALUATION REPORT

7.1 Comments on the summary of project ratings and terminal evaluation findings based on other information sources such as GEF EO field visits, other evaluations, etc.

With regard to the January 2006 Mid-Term Review Report:

- The MTR is not well organized, but provides useful and detailed information about M&E implementation, which is indispensable since the ICM does not provide much.
- Comments on Zambia's eligibility for carbon sales through the Kyoto Protocol's Clean Development Mechanism, indicating that some pilot initiatives have the potential for so.

With regard to the Audit Report Review:

- It is useful as it clarifies information about budget and cofinancing that was not fully explained in the ICM.

Provide a number rating 1-6 to each criteria based on: Highly Satisfactory = 6, Satisfactory = 5, Moderately Satisfactory = 4, Moderately Unsatisfactory = 3, Unsatisfactory = 2, and Highly Unsatisfactory = 1. Please refer to document GEF Office of Evaluation Guidelines for terminal evaluations review for further definitions of the ratings. Please briefly explain each rating.

7.2 Quality of the terminal evaluation report	Ratings
a. To what extent does the report contain an assessment of relevant outcomes and impacts of the project and the achievement of the objectives? The report explains that farmers have gained the necessary knowledge not to practice *chitemene* (slash-and-burn system) any longer, but the document fails to explain the reasons behind why most remain practicing *chitemene* and why the ones that have adopted new techniques might return to *chitemene*.	4
b. To what extent the report is internally consistent, the evidence is complete/convincing and the IA ratings have been substantiated? Are there any major evidence gaps? Although most of the ICM sections have been well explained and substantially rated, the document provides almost no information on M&E.	4

c. To what extent does the report properly assess project sustainability and /or a project exit strategy? No institutional framework or governance was achieved, and the environmental risks with the maintenance of *chitemene* are acknowledged in the ICM. However, although some financial resources could have been planned to be used in future monitoring or institutional assistance to farmers, nothing has been planned. The ICM affirms that this issue is not applicable to the project, but this is not necessarily true.	4
d. To what extent are the lessons learned supported by the evidence presented and are they comprehensive?	5
e. Does the report include the actual project costs (total and per activity) and actual co-financing used?	5
f. Assess the quality of the reports evaluation of project M&E systems? The ICM has basically no information about the M&E, which were analyzed in this Review through the PAD submitted for CEO Endorsement and the Mid-Term Review.	1

8. SOURCES OF INFORMATION FOR THE PRERATATION OF THE TERMINAL EVALUTION REVIEW REPORT EXCLUDING PIRs, TERMINAL EVALUATIONS, PAD.
Mid-Term Review, Audit Report Review.