

GEF EO Terminal Evaluation Review Form

1. PROJECT DATA				
GEF Project ID: 1311		Review date:		
IA/EA Project ID: 1124		at endorsement (Million US\$)		at completion (Million US\$)
Project Name: Pilot Production and Commercial Dissemination of Solar Cookers		GEF financing: 0.8		0.8
Country: South Africa		IA/EA own:		
		Government: 0.1		0.1
		Other*: 2.75		0.01
		Total Cofinancing		2.85
		Total Project Cost:		3.65
Operational Program: 6				2.11
IA UNDP		<u>Dates</u>		
Partners involved: Department of Minerals and Energy		Work Program date		Not available
		CEO Endorsement		8/13/2001
		Effectiveness/ Prodoc Signature (i.e. date project began)		6/24/2002
		Closing Date	Proposed: 6/24/2005	Actual: 9/1/2006
Prepared by: Timothy Ranja	Reviewed by: Neeraj Negi	Duration between effectiveness date and original closing: 37 Months	Duration between effectiveness date and actual closing: 51 Months	Difference between original and actual closing: 15 Months
Author of TE: Jason Schaffler		TE completion date: March 2006	TE submission date to GEF OME: July 2007	Difference between TE completion and submission date: 17 months

* 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

Please refer to document "GEF Office of Evaluation Guidelines for the verification and review of terminal evaluations" for further definitions of the ratings.

	Last PIR	IA Terminal Evaluation	Other IA evaluations if applicable (e.g. IEG)	GEF EO
2.1 Project outcomes	MS	U	NA	U
2.2 Project sustainability	N/A	U	NA	U
2.3 Monitoring and evaluation	NA	S	NA	S
2.4 Quality of the evaluation report	N/A	N/A	NA	S

Should this terminal evaluation report be considered a good practice? Why?

Yes, with reservations. The outcomes, sustainability, monitoring and evaluation issues are covered in detail in the report and the lessons and the recommendations in the report are applicable to other GEF projects. The report however does not adequately address the financial management issues and this has implications on cost effectiveness.

Is there a follow up issue mentioned in the TE such as corruption, reallocation of GEF funds, etc.?

No

3. PROJECT OBJECTIVES AND ACTUAL OUTCOMES

3.1 Project Objectives

<ul style="list-style-type: none"> • What were the Global Environmental Objectives of the project? Were there any changes during implementation? <p>According to the project document the global environmental objective of the project is climate stabilization by reducing carbon dioxide emissions. There were no changes during implementation.</p>
<ul style="list-style-type: none"> • What were the Development Objectives of the project? Were there any changes during implementation? <p>According to the project document the main objective of the project is to remove barriers that currently hamper the local manufacturing, retailing and provision of after sales services for different solar cookers; remove awareness and information barriers existing with end-users in the target areas as well as with other stakeholders involved in the further development of solar cooking and baking. The purpose of the UNDP/GEF funded component of the project, more specifically was to attempt pilot production and commercial dissemination of solar cookers in South Africa. There were no changes during implementation.</p>
<p>3.2 Outcomes and Impacts</p>
<ul style="list-style-type: none"> • What major project outcomes and impacts are described in the TE? <p>According to the TE, following are key accomplishments of the project:</p> <ul style="list-style-type: none"> • An emission reduction total attributable to the last three years of SOLCO project activity of approximately 5100 tCO₂e to 2012 • Seven business enterprises have adopted the technologies promoted by the project and are now producing 720 solar stoves in 2005 and a total of 1243 solar cooker sales are attributable to the project over the 3 year project cycle. • Saving of 33 hours per household per month since they were not spending time collecting firewood or other fuels. • Thirty one persons got employment by being employed in production of the solar cooker by the enterprises and approximately 1000 households have higher disposable income due to energy savings from switching to solar cookers from other fuels.

4. GEF EVALUATION OFFICE ASSESSMENT	
4.1.1 Outcomes (use a six point scale 6= HS to 1 = HU)	
A Relevance	Rating: HS
<p>The project outcomes are consistent with the focal areas/ and operational program strategies (OP 6: Promoting the Adoption of Renewable Energy by Removing Barriers and Implementation Costs). It did address the issue of adoption of renewable energy technology by reducing barriers. The project is also relevant to the country priorities. About 85% of households in the country use a mixture of paraffin, wood and low grade coal. In addition to health and safety risks associated with the domestic use of these fuels, the projects primary target market have been shown by various reliable studies to average 15% of household income. The project has consistency with development plans and focuses on national environment and development interests such as the GEAR Strategy.</p>	
B Effectiveness	Rating: U
<p>The project did not achieve the expected outcomes. It was overly ambitious as it aimed at establishing a viable market demand for commercially available renewable energy cooking technologies in South Africa. The achieved reduction in carbon dioxide emissions was only 2.5% of the target. There was no notable price reduction even in nominal terms. Only 7209 or 12% of the targeted 58000 are cooking with solar energy. Although, the number of businesses with project related technologies more than doubled, overall participation of the private sector was way below expectations. The failure of the project to attract entrepreneurs to invest in the solar cooker supply chain despite the indirect incentives provided by the project indicates the promoted technology is still immature and is, therefore, unable to provide viable points of market entry.</p>	
C Efficiency (cost-effectiveness)	Rating: MU
<p>Given the incremental cost investment of US\$ 800 000 the expected unit abatement cost of emission reductions was expected to be in the range from USD 12 to USD 22 per tonne of Carbon (USD 3.50 to USD 6.00 per tCO₂e). However, the actual cost was way higher at..... This is also considerably higher than the per tonne carbon emission reduction rates experienced in other projects of the GEF. Therefore, the project was not cost effective.</p>	

4.1.2 Impacts
This experience shows that the project's intervention was not timely. The project, although it has not

achieved its objectives, has facilitated involved stakeholders in learning lessons regarding solar cookers interventions in South Africa. In the given South African context, GEF investments in such activities may not be economically viable.

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= no or negligible risk to 1= High risk)

A Financial resources	Rating: U
Given that the quantifiable benefits of the projects are limited, it will be difficult to attract financing and sustain the marginal gains made.	
B Socio political	Rating: MU
Despite the relevance of the project, solar cookers do not receive the kind or level of support from national government that other fuels and cooking fuels such as paraffin and bio-fuels are getting. The low level of funding has negatively impacted the dissemination of solar stoves in the country. The solar cooking technology also faces risks because it is not socially acceptable to the people. Cooking and baking making use of solar energy is new and contrasts with the traditional way of cooking with biomass and/or paraffin, gas, electricity resulting in natural resistance; similar for the required changes in cooking habits, among others the time of day for cooking.	
C Institutional framework and governance	Rating: MU
Unlike other African countries, South Africa has a well developed suite of cooking alternatives available at an affordable level. The Government institutions therefore do not promote solar cookers as aggressively as might be needed for the technology to reach a critical mass. There have however been some positive developments that might help in promoting the technology. For instance there was incorporation of outcomes of the project into national policy and energy strategy through for example the establishment of the domestic cooking and heating energy roundtable for the creation of a comprehensive and coordinated strategy on cooking including national departments such as the Department of Science and Technology and the Department of Minerals and Energy. The founding of the African Renewable Energy Cooking Association (AFRECA) provides some hope since it is going to act as a platform to promote solar cookers.	
D Environmental	Rating: NA
The TE does not discuss the environmental risks associated with the project.	

4.3 Catalytic role

a. Production of a public good
The project, although it has not achieved its objectives, has led to other lessons being learned regarding solar cookers in South Africa. There is conclusive proof that the time was not right for solar cookers. This implies that commercialization is not possible in the current market. Some of the solar cookers were adopted by the people and it did lead to reduction in carbon emissions. Overall the project failed as the gains made were below expectations. Given the level of GEF investments, the project was not justifiable.
b. Demonstration
According to the TE solar cookers were included in site demonstrations, although they received less attention than the other technologies.
c. Replication
According to the TE, it is highly unlikely that the approach to solar cooker market development used here will be replicated in the near future.
d. Scaling up
No scaling up is indicated in the TE

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): S
A clear logical framework matrix and indicators improved the monitoring	
B. M&E plan Implementation	Rating (six point scale): S
The TE indicates that the annual project reports were thorough. A baseline was established. Appropriate indicators for tracking progress and methodology for monitoring changes were specified. Actual monitoring of changes was carried out as per the expectation. A clear logical framework matrix and therefore indicators improved the monitoring. It allowed conclusive establishment of the failure of the project.	
C.1 Was sufficient funding provided for M&E in the budget included in the project document?	

Yes. US Dollar 15,000 was budgeted for GEF baseline and monitoring and is fully incremental. The total budget for evaluation and monitoring missions was US\$ 100,000.
C.2 Was sufficient and timely funding provided for M&E during project implementation? NA. There are no figures available to do this assessment. However, the information provided in the TE is sufficient to indicate the level of achievements of the project. The work done by the evaluator was thorough and detailed and involved all the steps required to do an evaluation.
C.3 Can the project M&E system be considered a good practice? Yes.

4.5 Lessons and Recommendations

Project lessons and recommendations as described in the TE

What lessons mentioned in the TE that can be considered a good practice or approaches to avoid and could have application for other GEF projects?
Incorporation of a mechanism for market assessment prior to project initiation and careful consideration of the needs of the perceived target market The importance of careful documentation thereof, thorough dissemination to stakeholders and suitable archiving of these should not be overlooked.
List (or if detailed summarize) the recommendations given in the terminal evaluation
Continued consideration of solar cooking in niche applications

4.6 Quality of the evaluation report 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 the verification and review of terminal evaluations" for further definitions of the ratings.

4.6.1 Comments on the summary of project ratings and terminal evaluation findings from other sources such as GEF EO field visits, etc.
No such information available to the reviewer

4.6.2 Quality of terminal evaluation report	Ratings
A. Does the report contain an assessment of relevant outcomes and impacts of the project and the achievement of the objectives?	S
B. Is the report internally consistent, is the evidence complete/convincing and are the IA ratings substantiated?	S
C. Does the report properly assess project sustainability and /or a project exit strategy?	S
D. Are the lessons learned supported by the evidence presented and are they comprehensive?	MS
E. Does the report include the actual project costs (total and per activity) and actual co-financing used? According to the report, the evaluation team did not study the project financial management. There is therefore no break down of how the finances were used.	U
F. Does the report present an assessment of project M&E systems?	MS

4.6.3 Assessment of processes affected attainment of project outcomes and sustainability.

Co-financing and Project Outcomes & Sustainability. 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, and if it did affect outcomes and sustainability then in what ways and through what causal linkage did it affect it?
The originally anticipated co-financing included sales revenue from end users of USD 2.5 million. This did not materialize. This however does not seem to have any impact on the outcomes. Thus, lack of mobilization of cofinancing was primarily due to lack of progress shown by the project in achieving expected results.
Delays and Project Outcomes & Sustainability. If there were delays in project implementation and completion, then what were the reasons responsible for it? Did the delay affect the project's outcomes and/or sustainability, and if it did affect outcomes and sustainability then in what ways and through what causal linkage did it affect it?
The estimated project period from July 2002 to June 2005. A cost neutral extension of 6 months was provided by GEF extending the project duration from 36 to 42 months. The demand for the technologies promoted by the project were unaffected by the modest completion delay. Therefore, it appears that the delay itself did not affect the project's ability to attain the intended outcomes or risks to sustainability of the

outcomes.

4.7 Is a technical assessment of the project impacts described in the TE recommended? Please place an "X" in the appropriate box and explain below.

Yes:	No: X
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Explain: Project impacts are well documented in the TE

4.8 Sources of information for the preparation of the TE review in addition to the TE (if any)

Project Document, PIR 2003, PIR 2004, PIR 2005, PIR 2006