GEF EO Terminal Evaluation Review Form

1. PROJECT DATA				
			Review date:	February 2011
GEF Project ID:	1079 FSP		at endorsement (Million US$)	at completion (Million US$)
IA/EA Project ID:	2146 (UNDP) / P075194 (WB)	**GEF financing:**	3.48	3.48
Project Name:	Off-grid Rural Electrification for Development (PCH / PERZA)	IA/EA own:		
Country:	Nicaragua	Government:		
		Other*:		
		Total Cofinancing:	10.52	23.27
Operational Program:	OP#6: Promoting adoption of renewable energy by removing barriers/reducing implementation	**Total Project Cost:**	14.00	26.75
IA:	UNDP / World Bank	Dates		
Partners involved:	National Commission of Energy (CNE)	Effectiveness/ Prodoc Signature (i.e. date project began)		July 2003
		Closing Date	Proposed: December 2008	Actual: March 2009
TER Prepared by: Oreste Maia-Andrade	TER peer reviewed by:	Duration between effectiveness date and original closing (in months): 66 months	Duration between effectiveness date and actual closing (in months): 69 months	Difference between original and actual closing (in months): 3 months
Author of TE: María Victoria Urquijo		TE completion date: June 2009	TE submission date to GEF EO: August 2010	Difference between TE completion and submission date (in months): 14 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 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	S	No rating for this criteria (according to the IA EO)	S	MS
2.1b Sustainability of Outcomes	N/A	S	N/A	ML
2.1c Monitoring and evaluation	U/A	MS	S	S
2.1d Quality of implementation and Execution	N/A	HS	S	S
2.1e Quality of the evaluation report	N/A	N/A	S	S

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

The Terminal Evaluation (TE) should be considered a good practice as it is lucid and comprehensive.

- The document presents a sound analysis of the project performance.
- Beyond the good overall quality of the report, it additionally provides a useful visualization of the Project through annexed photos, as well as thoughtful comments from the Nicaraguan Ministry of Energy and Mines (MEM) at the end.
- The coverage of sustainability aspects is, however, weak.

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 TE.

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 project appraisal document (PAD) submitted for CEO Endorsement:

- "The Project's global environmental objective is to achieve greenhouse gas (GHG) reductions through the reduction of policy, information, financing and institutional capacity barriers that currently hinder renewable energy technology (RET) dissemination and market development in Nicaragua."

No changes were noted in the TE.

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 main project development objective is to support the sustainable provision of electricity services and associated social and economic benefits in selected rural sites in Nicaragua, and strengthen the Government's institutional capacity to implement its national rural electrification strategy."
- "This [the main project development objective] would be accomplished by (i) supporting the Government in the design and implementation of its national rural electrification strategy; (ii) implementing innovative public/private off-grid electricity delivery mechanisms in several pilot sites for later replication on a national scale; and (iii) demonstrating in the pilot areas the potential of targeted rural microfinance and business development services (BDS) to significantly enhance the development impact of rural electrification."

No changes were noted in the TE.

Overall Environmental Objectives	Project Development Objectives	Project Components	Any other (specify)
N/A	N/A	N/A	N/A

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)
N/A	N/A	N/A	N/A	N/A

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:

- The Nicaraguan projects for rural electrification have been contributing to increase significantly the rural access to electricity. The funds provided by the GEF, the Bank, the UNDP and the Swiss Government were fundamental in this achievement.
- Nicaragua has a wide hydroelectric potential that can facilitate the access of isolated villages to renewable energies and mitigate their consumption of fossil sources. Considering the environmental and developmental importance of rural electrification in Nicaragua, which increases accessibility to electricity through clean energy sources, the relevance of Project's outcomes is rated as satisfactory.

b. Effectiveness **Rating:** 4

Moderately Satisfactory:

- The TE highlights "the great merit" of Small Hydroelectric Plants (SHPs) for having triggered a "culture of sustainable hydropower" in Nicaragua, given the significant public exposure of SHPs and their micro-turbines. According to the TE, the SHPs and their micro-turbines generate not only important socio-economic impacts such as local development, but also environmental benefits by promoting the sustainable management of the local watershed, and reducing global emissions of carbon dioxide.
- Despite the positive aspects, however, the lack of a comprehensive master plan to guiding off-grid electrification initiatives, the high dependency on international funding sources; the political and institutional uncertainty with regard to support by governmental agencies; and the risk of loosing trained personnel to other initiatives; all these aspects minimized the Project's effectiveness. Therefore, the project outcomes were not fully commensurate with the expected outcomes, and effectiveness is rated as moderately satisfactory.

c. Efficiency (cost-effectiveness) **Rating:** 5

Satisfactory:

- Delays did not compromise project objectives and were related to ground circumstances, such as the seasonal rains in the areas of construction, the particularly rocky soil, and poor condition of roads for the transport of materials. The TE further argues that execution is "generally slower than expected in the ProDoc", and the construction of SHPs is "hardly achieved" in a period of four years.
- Concerning costs, the rate calculation was based on maintenance costs, reserves for major repairs and expansion of services. The TE notes that the forecast of future demand must be handled carefully, since places are chosen based on their growth potential, which implies a necessarily costly oversizing of the SHP at initial stages, simultaneously anticipating future growth in demand and handling low profitability in the first years of operation.
- Considering the important outcomes described in the TE, and having also noticed that shortcomings (delays) described above had minor importance only, the project's outcomes are considered satisfactorily cost-effective.

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:** 3

Moderately Likely:

- The TE affirms that the Fund for the Development of Electricity Industry (FODIEN) still have to improve legal aspects in order to facilitate the funding instead of just the formulation of projects in the area, because the funding is still highly dependent on international sources. The existence of international and foreign sources allows, however, for a moderate likelihood of financial sustainability.

b. Socio political **Rating:** 3

Moderately Likely:

- PERZA is clearly oriented towards a local-based development perspective, involving local and/or small organizations, whose lack of experience in project implementation has been tackled by PERZA through capacitation initiatives. Although optimism prevails, there is no certainty of either political support by the governmental agencies in providing continued funding to FODIEN, or maintenance of trained personnel within the local projects, which leads to a moderate likelihood of socio-political sustainability.

c. Institutional framework and governance **Rating:** 3

Moderately Likely:

- The TE affirms that the Nicaraguan Ministry of Energy and Mines (MEM) along with the CNE, which have already led the articulation of the legal framework with regard to national energy policies, will ensure the continuity of projects of off-grid hydroelectric plants. However, there is an institutional lack of a comprehensive master plan to guiding off-grid electrification initiatives, which would be particularly useful in a resource-less country like Nicaragua. Therefore, considering the institutional shortcomings, but also the legal governance improvements materialized in the approval of Law 532 on Renewable Energies, there is a moderate likelihood of institutional and governance sustainability.

d. Environmental **Rating:** 3

Moderately Likely:

- With relation to impacts, the TE highlights that the SHPs in operation have important environmental impacts, such as the sustainable management of the watershed at the local level, and avoidance of carbon emissions at the global level. Concerning the management of watersheds, the Project has provided training on environmental management of forest areas to local producers and community leaders. These trainings included incentives such as the delivery of tools and environmental education programs broadcasted by radio. Environment protective actions include the establishment of agroforestry systems.
- Besides the positive environmental aspects related to impacts and management of watersheds, the TE has not provided further details on environmental sustainability. No specific data was given with regard to environmental standards or goals. Having in mind the positive achievements mentioned in relation to environmental management, but considering the lack of information in this area, environmental sustainability is rated no higher than moderately likely.

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 amount of cofinancing was much beyond expected:

- Significant cofinancing contributed to achieve Project goals and eliminated financial uncertainties during execution. The TE details only the use of GEF funds (Annex C), since cofinancing institutions have contributed either through their own executing organizations or through UNDP.

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?

Delays did not compromise project objectives and were related to ground circumstances:

- In terms of schedule, delays were attributed by the TE to "external circumstances", such as the frequent, seasonal rains in the areas of construction, the particularly rocky soil and poor condition of roads for the transport of materials. Among the lessons learned, it is mentioned that execution is "generally slower than expected in the ProDoc." According to the TE, the construction of small hydroelectric plants is "hardly achieved" in a period of four years.

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.

Country Ownership was an important aspect of this particular Project:

- All involved partners displayed an important commitment to the Project and exchanged information during execution. PERZA agencies and governmental institutions (MEM, FODIEN) developed a satisfactory contact within the National University of Engineering (UNI), through regular meetings, workshops, training sessions etc. The participation of the local electric firms (ELEs) was particularly noted as a remarkable proof of community engagement, since ELEs involve high percentages of local members.

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:

- A "detailed and practical M&E plan" was designed, according to the PAD submitted for CEO Endorsement, which also affirms that "the plan will provide advice on how to set up a monitoring system, with specific recommendations on setting baseline data, data collection instruments, frequency of data collection, timing, reporting format, etc. It will identify training needs of staff for this purpose and recommend the appropriate organizational arrangement. […] Specialized technical staff of the CNE will be responsible to measure the client level impact and institutional sustainability of the microfinance activities, as well as the client level impact and full cost-recovery aspects of the BDS Component."
- The PAD also explains that "the participatory monitoring and evaluation strategy will have a very high return on costs as it will serve for a variety of uses that are central to the success of PERZA. Besides (i) its obvious importance for measuring project success against the defined performance indicators of the Project components, the M&E strategy would (ii) be used to assemble and analyze feed-back from the Phase One and Two sub-projects to allow for improvement of FODIEN, successful demonstration of new business models to attract private sector players, and replication in future CNE projects (phase three and beyond); (iii) be directly linked to the OBA approach of the Project, where performance indicators (such as number and quality of SHS installations) will have to be measured by CNE in an efficient way in order to disburse subsidies; and (iv) demonstrate to CNE and INE how the future regulation of new off grid providers in remote areas can be organized without excessive high costs to the regulator."
- Considering the detailed and practical aspect of the M&E plan, along with its participatory and multi-purpose aspects, with sound tracking scheme through SMART indicators of results and progress towards achieving project objectives, all considered practicable and sufficient, M&E at entry is rated as satisfactory.

b. M&E plan Implementation **Rating (six point scale):** 4

Moderately Satisfactory:

- According to the TE, there was a regular monitoring of activities under the Annual Plan of Operations; quarterly and annual reports required by UNDP/GEF; and a mid-term external evaluation, meeting all reporting requirements and methods of monitoring and control UNDP-GEF, in particular with regard to administrative and financial information of the activities planned and executed.
- The project has contributed to generate important information on implementation of the project, which was disseminated through workshops, events and brochures. Nevertheless, a good systematization of the information generated would allow to drawing lessons, but this is still missing. The Project prepared a report on the development of Small Hydroelectric Plants, discussing the construction process, local capacity building, management of watersheds and gender issues. However, it has not yet made a second study to see the local impacts of these plants or the legal framework at the national level. Although this lack of systematization of the information gathered limits the drawing of lessons and consequently their replication, the Project still can systematize and disseminate this knowledge more adequately.
- According to the TE, the high workload for the project team has not left sufficient time for monitoring, analysis and synthesis. Additionally, the TE argues that the logical framework of the ProDoc use inadequate indicators and have not captured the particular dynamics of off-grid small hydroelectric plants.
- Considering the lack of systematization as a significant shortcoming, but pondering the TE's argument that some indicators would require adjustments to be applicable to the Project, M&E at Implementation is moderately satisfactory.

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:

- According to the TE, "In 2004, the National Energy Commission (CNE) formulated the National Rural Electrification Plan (PLANER), [aiming] to bring energy to 90% of the country's rural areas by the end of 2012. Rural Electrification Policy was approved in September 2006 as the main guide for plan implementation. However, sources of funding for rural electrification are limited. The Fund for the

Development of National Electricity Industry (FODIEN) receives its resources from concessions and licenses granted by the Nicaraguan Energy Institute (INE). However, the funds have not been sufficient. Several donors including the World Bank, UNDP and the Swiss government have also provided funds and support to advance the objectives of rural electrification in the country."

- Still according to the TE, "At national level there is significant potential for developing hydropower renewable energy projects to serve remote populations and for sale to the general public (which can mitigate the increased demand for fossil fuels in Nicaragua). The MEM is supported by the GEF and the UNDP to develop the project "Development of Small-Scale Hydropower for Productive Uses in Areas Outside of Network" also known by its short title "Project SHP. " The first phase of preparatory assistance helped to identify and develop potential hydroelectric sites, which allow the removal of barriers limiting the small-scale hydroelectric development in Nicaragua."
- PERZA has supported the formulation of the Law 532 on Renewable Energies, as well as the design of tax incentives and the inclusion of SHPs in the planning of rural electrification. At the national level, the Project has developed the technical and administrative capacity to analyze, design, implement and monitor the development of SHPs. The Project has also promoted the SHP market in Nicaragua, by promoting the conduction of feasibility studies of SHPs by investors. It has also developed a continuous training program in coordination with 2 universities. At the local level, the Project has contributed to the strengthening of technical and administrative capacities, supporting ELEs, covering feasibility studies, as well as the design, supply and installation of electromechanical equipment, pipelines, road rehabilitation, micro turbines, construction of civil works and electrical networks. The Project has also contributed to strengthening local capacities in sustainable management of watersheds, institutional coordination, as well as the diagnosis and implementation of management plans for watersheds, through cooperation agreements between ELEs and the MEM.
- To the TE, "Both Project Management and the Project Steering Committee and the Executive Committee worked according to their goals, ensuring that planning and decision making, as well as compliance with the quarterly and annual reports required by UNDP/GEF (which had been recommended during the midterm evaluation and audits), all were well implemented by the GEF funds, the Swiss cooperation, and the UNDP."
- All these steps taken by both the UNDP and the Bank, as well as the results achieved by them and their national partners, demonstrate the IAs focus on results, adequacy of supervision, reporting and so on, which allows for a satisfactory rating of the IAs quality of implementation.

c. Quality of Execution – for Executing Agencies[1] (rating on a 6 point scale): 5

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.

Satisfactory:

- Government institutions involved in the execution of the Project have taken action and agreed responsibilities and in particular the MEM has incorporated the Project's processes and experiences that set the tone for the development of SHPs.
- Coordination between participants – multilateral agencies (UNDP, WB), bilateral (Swiss, Dutch and German governments), governmental and private organizations – is considered very effective, achieving complementarity through good communication that facilitated the consultation and coordination in decision-making and operational activities.
- Ministry of Energy and Mines (MEM), established in January 2007, replaced the National Energy Commission (CNE) and took over the project. The MEM is responsible for the production of development strategies for the domestic electricity sector. In 2003, the CNE had developed the "Indicative Plan for the Generation of Electricity Sector in Nicaragua, 2003-2014" which aims to provide useful insights for private investors to guide their decisions on technologies to implement in the country; In 2004, the National Energy Commission (CNE) formulated the National Rural Electrification Plan (PLANER), which set objectives and investment figures for the period 2004-2013.
- All these steps taken by both the CNE and later by the MEM, as well as the results achieved by them, demonstrate the EAs focus on results, adequacy of supervision, reporting and so on, which allows for a satisfactory rating of the EAs quality of execution.

[1] 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.

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	Impacts
To Support the Government in the design and implementation of its national rural electrification strategy To Demonstrate in the pilot areas the potential of targeted rural microfinance and business development services to enhance the development impact of rural electrification To Implement innovative public/private off-grid electricity delivery mechanisms in several pilot sites for later replication on a national scale To Capacitate Stakeholders	Adoption of guidelines to the implementation of SHPs and their micro-turbines Increased awareness of the environmental importance of the SHPs Trained personnel	SHPs and their micro-turbines have triggered a "culture of sustainable hydropower" in Nicaragua, given their significant public exposure Reduction of global emissions of carbon dioxide and sustainable management of the local watershed Major socio-economic consequence: local development and increase in percentage of the populace with access to electricity	Greenhouse Gas (GHG) reductions were achieved by lowering barriers on policy, information, financing and institutional capacity, which use to hinder the dissemination of renewable energy technologies in Nicaragua

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:

- **Legal framework**: In April 2005, the Law 532 of the Promotion of Renewable Energies was approved by the Congress, establishing the reference framework for the development of off-grid rural electrification through small hydroelectric plants.
- **Institutional governance**: The supportive role of the CNE, other governmental institutions and NGOs to the Law 532 has enhanced institutional governance in relation to the promotion of renewable energies and rural electrification. The small, off-grid hydroelectric plants have improved the environmental sustainability of rural electrification, facilitating technical, administrative, risk-reduction and sustainable-management capacities at the local level.
- **Awareness raising**: According to the TE, the Project has developed a "sustainable hydroelectric culture" in Nicaragua, materialized in the construction of hydroelectric plants and the efficient micro-turbines, as well as in the boost of financing projects related to hydroelectricity with sustainable, socio-economic impacts.
- **Potential combined with need**: As mentioned earlier, Nicaragua has a wide hydroelectric potential that can facilitate the access of isolated villages to renewable energies and mitigate their consumption of fossil sources. The Nicaraguan projects for rural electrification have been contributing to increase significantly the rural access to electricity, and the funds provided by the GEF, the Bank, the UNDP and the Swiss Government were fundamental in this achievement.
- No unintended impacts were reported in the TE.

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:

- **Lack of a comprehensive master plan of action**: Negatively, the lack of a comprehensive master plan to

guiding off-grid electrification initiatives, the high dependency of international funding sources, the political and institutional uncertainty with regard to support by governmental agencies, and the risk of loosing trained personnel to other initiatives, all minimize the effectiveness of the Project.

- **Local particularities**: So far, delays did not compromise the project's objectives and were related to ground circumstances, such as the seasonal rains in the areas of construction, the particularly rocky soil, and poor condition of roads for the transport of materials. However, an attentive regard to that respect will contribute to avoid potential risks to outcome sustainability.
- **Lack of experience**: PERZA is oriented towards a local-based development perspective, involving local and/or small organizations, whose lack of experience in project implementation has been tackled by PERZA through capacitation initiatives.

d. **Evidence of Impact**

Question	**Yes**	**No**	**UA**
i. Did the evaluation report on ***stress reduction***[2] 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[3] of such reductions given the range of concerns targeted by the project. Yes: • The TE highlights that the SHPs in operation have important environmental impacts, such as the sustainable management of the watershed at the local level, • Concerning the management of watersheds, the Project has provided training on environmental management of forest areas to local producers and community leaders. These trainings included incentives such as the delivery of tools and environmental education programs broadcasted by radio. Environment protective actions include the establishment of agroforestry systems.			
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. Yes: • The TE highlights that the SHPs in operation have important stress reduction, such as the avoidance of carbon emissions at the global level.			
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. Yes: • Local involvement: PERZA is oriented towards a local-based development perspective, involving local and/or small organizations, whose lack of experience in project implementation has been tackled by PERZA through capacitation initiatives. All involved partners displayed an important commitment to the Project and exchanged information during execution. PERZA agencies and governmental institutions (MEM, FODIEN) developed a satisfactory contact within the National University of Engineering (UNI), through regular meetings, workshops, training sessions etc. • Community engagement: The participation of the local electric firms (ELEs) was particularly noted as a remarkable proof of community engagement, since ELEs involve high percentages of local members.			

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

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.				
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

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

Following is the summary of the good practices listed in the TE:

- Construction: The execution of works is generally slower than expected in the ProDoc, and delays tend to be related to ground conditions there were not anticipated, such as lack of experience among the executors, inclement weather and difficult terrains.
- Technologies: In order to eliminate technological risks in the case of SHPs, it is fundamental to choose design and components that are technically mature and proven to be efficient.
- Pathways: The bad situation of roads was among the main obstacles to the construction of SHPs, so the collaboration of national authorities and local companies in rehabilitating roads was essential.
- Fees: The SHPs had initial costs higher than traditional hydroelectric plants, so the collaboration of authorities with understanding the future benefits and consequently reducing regulatory barriers and some inapplicable taxes was essential, but the whole process of convincing authorities took a year.
- Costs: As already explained in the analysis of efficiency, the rate calculation was based on maintenance costs, reserves for major repairs and expansion of services. The forecast of future demand must be handled carefully, since places are chosen based on their growth potential, which implies a necessarily costly oversizing of the SHP at initial stages, simultaneously anticipating future growth in demand and handling low profitability in the first years of operation.
- Local actors: It is important to be clear about the roles of different actors involved in the process. For example, the City supports and contributes resources to manage their own resources (repair of roads, provision of offices); companies contribute to implement the project (with manpower and financial resources) and manage business issues; the local community assumes the payment of services; and so on. Beyond sustainability, economic and organizational issues require enthusiasm and optimism from local participants to compete and survive in an economic and political environment that might be unpredictable. Engaged participation of involved actors is key to solve problems and ensure the sustainability of local firms in the long run.
- Poverty Reduction: SHPs areas have proved to constitute poles of local development, attracting shops, workshops, mills, restaurants and other businesses.
- Micro-watershed management: Lack of political will within environmental regulatory agencies might constitute significant obstacles, especially when needed to enforce to deforestation laws.

b. Briefly describe the recommendations given in the terminal evaluation

Following is the summary of recommendations listed in the TE:

- Before the end of GEF resources: To improve the replication and the mobilization of the SHPs model (identification and promotion of projects, investment and ownership, distribution, operation and maintenance), the project should develop a detailed description of them, define a monitoring mechanism and

systematize lessons learned through impact studies.

- After then end of GEF resources: Monitoring and extraction of lessons deserve more attention both to demonstrate the value of GEF intervention and to refine the models of business investment. Some working capacity (at least one person full-time) should be released to conduct analyses on the Team Project, monitoring its operational implementation by the stakeholders, systematizing lessons learned, and updating studies and impacts regularly. A strategy of asset ownership (re-investments, networks) and economic sustainability should be developed in order to identify and make explicit the mandate and terms of trade for local utilities, including issues such as profitability, distribution and commercial operation, maintenance and reinvestment, service quality. The use of energy in rural areas should be developed through productive capacities and local business initiatives that ensure a well financed plan for watershed protection and management. In order to increase sustainability of results and activities, there should be a close supervision of the capacity building process with regard to the company management and operation of plants, as well as the adaptation and simplification of regulations and institutional procedures for SHPs, taking into account their vital importance for rural development.
- Institutionalization of rural electrification by SHPs and micro-turbines: MEM and FODIEN must continue to strengthen the issue of SHPs, with regard to human resources and management tools. They should clarify their role of FODIEN within MEM and transform its financial aspect into an integrated organizational structure for rural electrification. They should also apply lessons learned to optimize resource use and sustainability of results; develop an "Off-grid Energy Plan"; continue to streamline institutional procedures of rural electrification; develop and promote incentives and subsidies; and strengthen management capacities for power generation and distribution, as well as for productive use and local development.

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.

UNEP EO TER

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?	5
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?	5
c. To what extent does the report properly assess project sustainability and /or a project exit strategy? Despite the fact that all aspects of sustainability have presented shortcomings, environmental sustainability was not properly assessed in the TE, and inferences were made through analysis of other aspects.	3
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?	5

8. SOURCES OF INFORMATION FOR THE PRERATATION OF THE TERMINAL EVALUTION REVIEW REPORT EXCLUDING PIRs, TERMINAL EVALUATIONS, PAD.

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