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Ref. TF055524 Reporting Period: 08/12/2005 to 06/30/2011

Printed On: 06/02/2012 Report Type: Completion

Report Status: Approved

Assignment: TF055524

# GEF MSP-PAPUA NEW GUINEA: TEACHERS SOLAR LIGHTING PROJECT GEFIA - GEF-IBRD AS IMPLEMENTING AGENCY

Task Team Leader: 00000160653 - Wendy E. Hughes - Charles M. Feinstein

Summary Information				
TF Status	LCLS			
Recipient Country	Pap. New Guinea			
Executed By	Recipient			
Managing Unit	8298 - EASNS			
Grant Start Date / Closing Date	08/12/2005 to 09/30/2010			
Program Manager				
Original Grant Amount	992,000.00			
Grant Amount	163,692.51			
Outstanding Commitments	0.00			
Cumulative Disbursements	163,692.51 as of 06/30/2011			
Disbursed 08/12/2005 to 06/30/2011	163,692.51			
Donor	TF602001 - MULTIPLE DONORS			

This GRM report includes the following sections: Overview, Outcome, Components/Outputs, Execution, Program(GEFIA), Completion, Processing, Attached Documents, Disbursements, Internal Comments.

Internal Bank Report Page 1 of 8

FOR OFFICIAL USE ONLY

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## OVERVIEW

## Overall Assessments and Ratings

#### **Grant Objectives:**

The purpose of the Grant is to assist in the financing of the PNG Teacher#s Solar Lighting Project(Project), which has as its main objective the improvement of the life of teachers, health workers, and other public employees in rural areas, by making available affordable, environmentally sound, basic electricity services from renewable energy. The main global environmental objective is to create early markets for Solar PV household electrification and build the capacity on the part of all market participants (providers, purchasers, and lenders) to scale up renewable energy use in PNG.

#### Overall progress from 08/12/2005 to 06/30/2011 with regard to Achieving Grant Objectives:

Rating: Highly Unsatisfactory( Previously Rated Unsatisfactory on 06/30/2007)

#### Comment:

The project design relied on TSL providing loans, but according to the MTR mission it became apparent early on during implementation that TSL#s management information system (MIS) was not equipped to handle the design of the TSLP product. This caused extensive project delays as a new MIS had to be designed and installed before any loans could be processed, or even before the project could be formally publicly launched. This took 12 months to complete, followed by staff training. Although there is some evidence of increased capacity at TSL and the institution now has a functioning MIS, the project had significant shortcomings both in its design and execution. There are more solar PV retailers active in the market and their business is growing. Demand for solar PV is high. Despite the relevance of the project objectives, several elements of its design and implementation were unsatisfactory and the project outcomes were not achieved. Consequently the overall project outcome is rated unsatisfactory.

## Overall progress from 08/12/2005 to 06/30/2011 with regard to Implementation of Grant Financed Activities:

Rating: Highly Unsatisfactory (Previously Rated Unsatisfactory on 06/30/2007)

#### Comment:

The project experienced extensive delays with implementation largely as a result of problems in the development and eventual operation of an MIS three years after the project start. The GEF Grant Agreement was signed on 12 August 2005 between the World Bank and PNG SEL yet the project was not effectively launched until 30 July 2008. As of January 2009, at the MTR point, only one solar lighting system had been sold (under a loan from TSL) out of the targeted 2,500-3,000. Only 10 percent of project funds were disbursed by the end of 2008 against a planned spend of 90 percent. The situation has not improved significantly at project closure as there has only been the sole loan under the project and project disbursement was only 16.5% at closure. Performance of the implementing agency was weak. Up until the MTR in late 2008, WB supervision was also weak.

# Grant follow-up and structure

Description and context of Grant:

Expected follow up (if any): Follow up Bank project/loan/credit/grant

#### Comment on follow up:

The project has since been closed and disbursements have ceased. The projects poor performance has led to no specific follow-on project being planned and the task team are now working to finalise and diseminate the Implementation Completion note. However, WB is engaging with GoPNG to assist in preparation of a national rural electrification policy adn strategy which aims to address the issue of low access to electricity in rural areas from a different angle.

End Date of Last Site Visit:

Restructuring of Grant:

# **Activity Risk**

Internal Bank Report Page 2 of 8

FOR OFFICIAL USE ONLY

Ref. TF055524 Reporting Period: 08/12/2005 to 06/30/2011

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Rating: High Risk Comment:

The original risk rating was substantial. Two of the factors contributing to this score, was the uncertainty of teachers buying Solar Home Systems (SHS), as the technology was not known. The other factor, was uncertainty over the interest of retailers to open retail outlets and provide maintenance and repair services in the district capitals. At the close of the project in May 2010 a number of major design weakness that caused implementation difficulties. Some of these may not have been foreseen at the time, but issues relating to the lending institution; its limited involvement at project planning, capacity and understanding of the project should have been addressed during preparation.

- 1.#Poor understanding of target beneficiary market: the project was designed to permit principally teachers to borrow from their credit union (TSL). Whereas teachers are largely already #over-borrowed#, do not earn sufficient salaries to afford the products on offer from the product catalogue, resulting in poor, virtually non-existent, loan uptake.
- 2.#Complex structure: The principal financial support instrument relies on TSL providing loans, yet, marketing, promotion, technical support and M&E was the responsibility of the executing agency PNG SEL. IFC experience of working directly with commercial lending institutions suggests that the institution itself needs to take on these responsibilities.
- 3.#Weak institutional support and communication: According the MTR (and during conversations with PNG SEL management) the executing agency was unfamiliar with World Bank procurement, procedures and guidelines and itself suffered high staff turnover. Communications between PNG SEL and the World Bank, and local counterparts and between the Department of Education and TSL. These relationships presented challenges for implementation. Did TSL really understand what they were signing on for
- 4.#Over-optimistic project schedule: the project timing of five years was probably sufficient overall, but given the required capacity building activities of the EA and TSL, the project outputs were unlikely to be achieved as scheduled.

# **Critical Issues and Pending Actions for Management Attention**

There are currently no issues and actions for Management attention.

## OUTCOME

#### Comments on outcome achieved from 08/12/2005 to 06/30/2011

The project has two clear project development objectives as defined above. The indicators are inadequate for a quantitative assessment. However, as the project only achieved a single solar PV loan, a full set of quantitative indicators would not have assisted in assessing outcomes. There are few project outputs and these are described below.

(a)#Improved teacher retention. Since only 1 loan was made, the project could not have contributed to any increased retention of teachers in rural areas.

(b)#Widespread use of solar PV

With only one solar PV loan (processed in October 2008) the project has not achieved its target of 2,500 systems and the key outcome has not been met.

#### **Grant Outcome Indicators**

Grant outcome indicators are listed below.

Internal Bank Report Page 3 of 8

FOR OFFICIAL USE ONLY

Ref. TF055524 Reporting Period: 08/12/2005 to 06/30/2011

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Over 900 systems have been installed, instead of the projected 90. Without waiting for the Product Catalogue, the IA, with their funds, assisted over 900 public servants with SHS.

Baseline Zero Solar Home Systems installed by Teachers, Health Workers and Public Servants in Rural Areas

Value:

Date: 08/12/2005

**Progress to** Only 1 loan for a solar home system was made under the project for the entire lifetime of the project.

Date:

Date: 10/20/2010

**Target Value:** The target value was 2,500.

Date: 07/25/2006

## COMPONENTS/OUTPUTS

There are no components defined for this trust fund / grant.

# Comment on planned and actual Output

## Comment on component implementation progress

Many of the project activities were not completed and the outcomes have not been achieved. The TSLP project has been poorly implemented and ineffective. Key reasons for this underachievement are:

##Overreliance on TSL: under the project, funds were provided to support lending for purchase of solar PV systems for teachers and other public employees. However, TSL#s management system was not equipped to handle the design of the TSLP product. Consequently a new MIS had to be designed and installed before any TSLP loans could be processed. This task took far longer than planned and with contracting, technical specification and staff training issues, resulted in significant delays. Only one SHLK loan was processed by TSL and approved under the project terms. This loan was processed and approved in October 2008, some three years after the proposed start date. This had a knock-on effect to other project components.

# mis-match between cost of equipment elegible under the project and the salaries of the supposed beneficiaries leading to affordability issues.

##Reliance on the EA to develop and implement an effective marketing plan: absence of a robust marketing strategy reduced effectiveness. The DoE had designed a marketing strategy for the project at preparation stage but was not involved during implementation. Activities such as the interactive video training program developed to show end users the purchasers use and maintenance of the SHLKs were completed. However, concerns were raised as to the effectiveness of such an approach.

##Limited assistance provided to the EA at project commencement: training was not provided to the EA, PNG SEL at project commencement resulting in interpretation difficulties of World Bank procurement, guidelines and procedure.

##Weak World Bank project supervision: many of the issues could and should have been identified and managed and addressed early on during implementation. This did not occur.

Internal Bank Report Page 4 of 8

FOR OFFICIAL USE ONLY

Ref TF055524 Reporting Period: 08/12/2005 to 06/30/2011

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## **EXECUTION**

# Bank project related to the grant

Project ID / Name: P088940 - PG-GM-Teacher's Solar Lighting Project

**Project Status:** Lending Global Focal Area: Climate change

**Product Line:** GM - GEF Medium Sized Program

# Implementing agency and contact details

PNGSEL Papua New Guinea Sustainable Energy Limited Agency:

Contact: Joseph Darr

Address: 7th Floor, Pacific Place, P.O. Box 1786, Port Moresby 121, PNG

Phone: 675 321 2222 Email: Joseph.Dar@pngsel.com

Website:

# Implementation performance ratings from 08/12/2005 to 06/30/2011 with regard to:

Project Management: Unsatisfactory (Previously Rated Moderately Unsatisfactory on 06/30/2007)

**Brief Comment:** 

weak

Financial Management: Moderately Unsatisfactory (Previously Rated Moderately Unsatisfactory on 06/30/2007)

**Brief Comment:** 

None

Counterpart Funding: Not Applicable (Previously Rated Moderately Unsatisfactory on 06/30/2007)

**Brief Comment:** 

None

Procurement: Not Applicable (Previously Rated Moderately Unsatisfactory on 06/30/2007)

**Brief Comment:** 

None

Monitoring and Evaluation: Not Applicable (Previously Rated Moderately Unsatisfactory on 06/30/2007)

**Brief Comment:** 

None

# Additional Comments on Implementation Performance:

Internal Bank Report Page 5 of 8

FOR OFFICIAL USE ONLY

Ref. TF055524 Reporting Period: 08/12/2005 to 06/30/2011

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## **PROGRAM**

# **Program Specific Ratings**

- 1. Please rate public involvement Unsatisfactory
- 2. Please rate government commitment Not Applicable
- 3. Please rate safeguard performance Not Applicable
- 4. Please rate arrangements for sustainability Unsatisfactory

# **Program Specific Questions**

1. Please comment on additional resources leveraged

none

## COMPLETION

## **Overall Assessments and Lessons Learned**

#### Main lessons learned:

reaslistic evaluation of the costs and benefits, implementation capabilities and actual demand for such a program should be undertaken prior to launching any similar project.

## Overall outcome (and its Sustainability): Rated Unlikely

#### Comment

The program design was flawed in a number of respects, discussed in the overview. Implementation capability was very weak. The combination meant that the project never really got off the ground and hence there was no outcome to sustain.

#### **Bank Performance: Rated Moderately Unsatisfactory**

#### Comment:

A lack of sufficent data and/or assessment of the "on the ground" situation led to a weak design. Weak supervision for at least the first two years meant that starting delays had a significant negative impact on the overall project.

## **Additional Assessment**

#### Development / strengthening of institutions: Rated Negligible

#### Comment:

The project contributed to some improvements in the TSL financial management processes

## Mobilization of other resources: Rated Not Applicable

#### Comment:

none

#### Knowledge exchange: Rated Negligible

#### Comment:

very little knowledge exchange impact as the project implementation never accumulated any momentum

## Client's policy / program implementation: Rated Negligible

## Comment:

The project was designed with little input from the Government. The implementing Agency was the Teachers Savings and Loan organization. The Department of Education had some involvement early on but had no real ownership of the project.

Internal Bank Report Page 6 of 8

FOR OFFICIAL USE ONLY

Ref. TF055524 Reporting Period: 08/12/2005 to 06/30/2011

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**Efficiency: Rated Unsatisfactory** 

Comment: poor

Replicability: Rated Unlikely

Comment:

This concept should not be replicated unless there is significant further work done on affordability and access to realistic sources of financing.

#### Main recommendations to stakeholders:

Undertake realistic assessment of demand, affordability and implementation capacity during project preparation.

#### Main recommendations to Bank Management:

Engage the appropriate government departments (Department of Planning and Monitoring, Department of Petroleum and Energy) in future efforts to expand access to electricity.

## **PROCESSING**

# Manager's comments on this GRM report:

Date:06/02/2012 User ID:WB17808 Name:Mr Charles M. Feinstein Operation performed:Approved by Manager No comments

# GRM report history - Requested on 07/15/2011, due on 09/30/2011

Action	Name	Status	Date
Created	Wendy E. Hughes	Draft	02/22/2012
Changed	Wendy E. Hughes	Draft	02/22/2012
Changed	Wendy E. Hughes	Draft	02/22/2012
Changed	Wendy E. Hughes	Draft	02/22/2012
Changed	Wendy E. Hughes	Draft	02/22/2012
Changed	Wendy E. Hughes	Draft	02/22/2012
Changed	Wendy E. Hughes	Draft	02/22/2012
Changed	Wendy E. Hughes	Draft	02/22/2012
Mail sent to Reviewer	Wendy E. Hughes	Draft	02/22/2012
Mail sent to Reviewer	Wendy E. Hughes	Draft	02/29/2012
Mail sent to Reviewer	Wendy E. Hughes	Draft	02/29/2012
Submitted to TTL	Nicole Forrester	Draft	04/02/2012
Submitted to TTL	Nicole Forrester	Draft	04/09/2012
Changed	Wendy E. Hughes	Draft	06/01/2012
Submitted for Approval	Wendy E. Hughes	Submitted	06/01/2012
Mail Sent to PM	Wendy E. Hughes	Submitted	06/01/2012
Approved by Manager	Charles M. Feinstein	Approved	06/02/2012

Internal Bank Report Page 7 of 8

FOR OFFICIAL USE ONLY

Ref. TF055524 Reporting Period: 08/12/2005 to 06/30/2011

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**DOCUMENTS** 

None

## **DISBURSEMENTS**

# **Disbursements Summary in USD**

<b>Date From</b>	Date To	Planned Cumulative	Planned Period	Actual Cumulative	Actual Period
07/01/2005	12/31/2005	0.00	0.00	0.00	0.00
01/01/2006	06/30/2006	0.00	0.00	0.00	0.00
07/01/2006	12/31/2006	0.00	0.00	0.00	0.00
01/01/2007	06/30/2007	0.00	0.00	0.00	0.00
07/01/2007	12/31/2007	0.00	0.00	0.00	0.00
01/01/2008	06/30/2008	0.00	0.00	0.00	0.00
07/01/2008	12/31/2008	0.00	0.00	73,692.51	73,692.51
01/01/2009	06/30/2009	0.00	0.00	73,692.51	0.00
07/01/2009	12/31/2009	0.00	0.00	73,692.51	0.00
01/01/2010	06/30/2010	0.00	0.00	73,692.51	0.00
07/01/2010	12/31/2010	0.00	0.00	73,692.51	0.00

## INTERNAL COMMENTS

Date:06/02/2012 User ID:WB17808 Name:Mr Charles M. Feinstein Operation performed:Approved by Manager No comments

Date: 04/09/2012 User ID: WB335796 Name: Ms Nicole Forrester Operation performed: Submitted to TTL Hi Wendy

I have made the required changes and this is now ready to submit. Please follow the link to submit.

Thanks Nicole

Date: 04/02/2012 User ID: WB335796 Name: Ms Nicole Forrester Operation performed: Submitted to TTL Hi Wendy

This is already to go, grateful if you could quickly look over and hit submit.

Cheers Nic

Date:02/29/2012 User ID:WB160653 Name:Ms Wendy E. Hughes Operation performed:

Sajjad: for your review please. regards

Wendy

Internal Bank Report Page 8 of 8