

**Transformation of the Rural Photovoltaic (PV) Market in Tanzania
00035062**

**Quarterly Operational Report
For the period
July-September 2006**

Basic project information :

Project Number & Title:	URT/03/G – Transformation of the Rural Photovoltaic (PV) Market in Tanzania
Executing Agency:	Ministry of Energy & Minerals
Implementing Agency:	United Nations Development Programme
Project starting date:	
Originally planned:	December 2003
Actual:	March 2004
Project Completion date:	
Originally planned :	December 2008
Actual :	December 2008
Total budget (\$):	
Original UNDP/GEF:	2,250,000
Latest signed revision :	2,250,000
Government (in kind):	147,600

This report covers the project performance in the period July-September 2006.

Immediate Objective 1 :

Output 1.3: Standards for PV components defined.

Activity 1.3.1: To follow up the implementation of PV standards and code of practice for technicians in cooperation with Sida project

Within the arrangements to implement the formulated and approved PV standards and code of practice for technicians, the TBS, with financial support from the Sida/MEM Solar PV Project set up a working group (WG) to prepare an inventory of proven PV technologies. The project is a member of this WG participated in its first meeting and closely following up the preparations for the second meeting.

Immediate Objective 2 :

To increase awareness among the general public, and especially decision makers, consumers and other end-users on the potential role of PV in meeting basic energy needs of rural communities.

Output2.1: Awareness program for decision makers developed and implemented.

Activity 2.1.1: Organize site visits by key decision makers

To enlighten the members of the Steering Committee of the Sida/MEM Solar PV Project on the achievements of this project and to assist and facilitate the proper coordination between the two projects, arrangements are made to organize a field visit by a number of the above committee to the project sites. These are the representatives of the Ministry of Finance, MEM, Confederation of Tanzania Industries and Commission for Science and Technology in the above S/C.

Output 2.2: End user awareness program formulated and implemented

Activity 2.2.1: To continue preparation & dissemination of information and awareness packages about PV systems and their potential to offer development benefits .

In the process of awareness raising, the project continued to distribute updated leaflets answering frequently asked questions (both in Swahili and English) as well as brochures reflecting the project profile, potential PV applications and the coordinates of the PV dealers.

The second issue of the newsletter could not be finalized and is expected to be issued in the coming quarter

Activity 2.2.2: To continue the started outreach programme utilising multi-media to raise awareness of the benefits of PV systems.

Radio and TV adverts & programs (revised and updated regularly) continued to be aired to sensitize the public on use of PV and inform them on the venues and dates of different project upcoming activities.

Activity 2.2.3: To participate in the Nane-Nane in cooperation with PV dealers in Mwanza.

The project participated in the Nane-Nane exhibition together with 4 PV dealers: Zara Solar, Mona Solar , AOL Technology from Mwanza City and Intra Profession from Sengerema. The Exhibition was inaugurated by The Commissioner of Nyamagana District on behalf of the Regional Commissioner and lasted for three days.

Activity 2.2.4: To print and disseminate the prepared booklet on educational material on PV systems for schools in the region

The booklet prepared, in consultation with the Regional Education Office as extra curriculum reading material for secondary school students, could not be printed for distribution, as it is still under the consideration of MEM for the final revision since January.

Activity 2.2.5: To organise general awareness campaigns (e.g. free PV-powered video shows on market occasions, etc.) together with the private dealers and SACCOS involved in PV financing.

A series of contacts between the dealers and members of two SACCOS were organized. These meetings were organized in conjunction with the visits by the

CRDB representative to these SACCOS to explain the details of the financing model proposed. Technicians from Mona solar and AOL technology Ltd participated in these meetings intended to aware members of SACCOS on potential uses of PV systems and their respective capital and operation costs.

A follow up meeting was held with the CRDB branch manager, in which ways to enhance the lending process were discussed. This was followed by a meeting with members of the Murutunguru SACCOS in Ukerewe that ended with eight members requesting PV systems to be financed, which is now under the consideration of the CRDB.

Output 2.3: Demonstration program implemented to show the functionality and usefulness of a limited number of PV installations in strategically important locations and niches.

Activity 2.3.1: To continue the installation of PV demonstration systems in the identified social centres to enhance awareness and identify new social sites for further installation of PV systems- 2nd phase

During this period the project technical team managed to visit six sites in Ukerewe and Misungwi districts, met with the Health Committees of respective dispensaries and health centres and signed with them MoU for installation of PV systems in their health facilities.

The installation of the PV demonstration systems was accomplished in only one site in Sengerema. The project is maintaining contacts with the DMOs in all of the above districts and the members of committees of the above facilities to enhance the contributions by the beneficiaries to finalize the installations.

Activity 2.3.2: Assist Regional Cold Chain Office to maintain the cold chain equipment - provide missing arrays

The required equipment (12 solar fridges and 4 additional arrays of each 4x50W_p) have been tendered for and the winner identified and notified to supply the equipment. In the mean time the RCCO continued to rehabilitate the fridges, provide new batteries and ensure the existence of a guard in all these centres. The DCCOs are also contacted to identify the sites for the new fridges(two in each of the six rural districts) and arrange with the beneficiaries to prepare their contributions (local materials and labour cost of installation) to accomplish the installations.

Immediate Objective 3 :

To strengthen and support the private sector working in the PV sector to provide better quality of service and to develop models for providing PV based electricity services to the rural areas.

Output 3.1: Business development services strengthened.

Action:3.1.1: To support the functioning of the local TASEA to facilitate networking among technicians, dealers and suppliers in the region in order to strengthen opportunities for collaboration, partnership, and co-operation .

Arrangement were made with the committee in charge of local TASEA to organize the proposed meeting. But due to the fact that the committee is understaffed, it could not make the necessary preparations in time.

Activity 3.1.2: To discuss alternative service delivery modes: a one day workshop

A one day workshop was organized (...) to discuss the findings of the study on PV electricity services delivery modes and roles of various stakeholders. The workshop was attended by the PV dealers in the region, representatives of two banks(CRDB and NBC), SACCOS, local TASEA, and a number of regional officers beside the project team. The study was presented by two of the study team. The study is being finalized by incorporating the w/s comments and recommendations.

Output 3.2 : Technical knowledge of PV strengthened.

Activity 3.2.1: Organize a training workshop for technicians on PV systems sizing, instalation and maintenance- technicians from other regions invited

A six days training workshop was organized for technicians(14) on PV systems design, sizing, installation and maintenance. This training , eighth in this series, was organized in the period 18-23rd September and was attended by technicians from Mara Region, .. from Kagera Region, ... from Ukerewe District, .. from Sengerema and .. from Mwanza City.

Activity 3.2.2:Organize a training workshop for medical workers responsible of cold chain equipment: on solar fridges

A three days(25-27 Sept) refreshment course on PV solar vaccine fridges: main components, operation, trouble shooting and maintenance was organized for the district cold chain officers and their assistants from the 8 Mwanza districts. This was organized in cooperation with the Regional Cold Chain Office and in preparation for the planned rehabilitation of the cold chain equipment and the expected addition of new PV vaccine fridges. The Regional Medical Officer attended the closing session.

Activity 3.2.2: To evaluate the PV training introduced in VETA, in cooperation with VETA HQ.

A consultant was hired (as an external examiner) to evaluate the PV course introduced in Mwanza VETA Centre. The evaluation covered the training performance versus the introduced curriculum, the staff availability, the adequacy of time allotted for different components, adequacy of training material and the students performance in the final examinations. The consultant has submitted his report which is under the consideration of VETA Authority and the Centre's management with the objective of gradual replication and introduction of the course in other VETA Centres through out the country.

Immediate Objective 4 :

To explore, develop and test viable financing options for selling PV systems.

Output 4.1 : The most promising model for consumer finance of PV systems identified, piloted and evaluated.

Activity 4.1.1: To establish and operate the recommended consumer financing model: monitor and evaluate together with CRDB and SACCOS.

Within the efforts to aware the members of the SACCOS involved in implementing the consumer financing model, three meetings were made with members of the selected SACCOS in Geita, Magu and Ukerewe. The PV dealers participated in these meetings where the procedures of lending were discussed. Difficulties encountered were:

- Low level of attendance by participants
- Some of the SACCOS could not qualify according to the CRDB criteria and requirements: opening of special accounts and establishment of offices
- Some of the proposals submitted by the SACCOS came from members with previous loans which were not paid.

Output 4.2: The most promising model for supplier or supply-chain financing in PV industry will be identified, piloted and evaluated.

Activity 4.2.1: To establish and operate a limited pilot system to test the recommended approach to supply-chain finance.

A one consultation session was organized with the consultant and the stakeholders, in which the main features of the recommended model were discussed. The direction is to overcome the main obstacle, which is the collateral issue, through use of guarantee scheme (by the project and further by government – REF and /or SMEs) coupled with post dated cheques by the borrowers. This model is now being finalized by the consultant.

Output 4.3 To provide limited grant financing to a small number of schemes proposed by the stakeholders to test various productive uses of PV in rural areas.

Activity 4.3.1: To support a small number of the best projects judged to most effectively meet the goals of the competition.

This quarter the project could supported only one PV income generating project proposed by the private sector. This was a woman saloon with phone charging in Sengerema. In general this activity has covered all the districts except Misungwi. Therefore, the project effort will be minimized the coming quarter to provide support to a few projects in Misungwi.

Immediate Objective 5:

Output 5.1 : Evaluation of Impact of PV on rural livelihoods in early adopting households and communities.

Activity 5.1.1: Analyse the 2nd survey data

The data of the survey conducted in the last week of June-First week of July have been analysed and the summary results will be presented during the T/C meeting.

Activity 5.1.2: Prepare the TOR for mid-term evaluation and procure consultants.

The TOR for mid-term evaluation has been completed in cooperation with MEM, UNDP CO and the GEF/UNDP Coordination Office for Southern Africa. The process of consultants procurement to join the evaluating team has been finalized and the evaluation is scheduled to start on the 16th of October 2006.

Activity 5.1.3: Continue the video documentation of project activities

A video film has been prepared documenting the main project activities and achievements up to the end of July 2006. A copy will be presented during the Technical Committee meeting .

Other activities:

During this period the PIU members participated in a number of other related activities:

- The PC participated in the meeting of the TBS working group expected to prepare an inventory of proven and tested PV system components.
- The PM participated in the parallel side events of the Third GEF Assembly held in Cape Town in the period 28-30 August 2006. He presented the project achievements and lessons learned and attended a number of presentations reflecting similar experiences in other countries.
- The PM participated in the 1st Steering Committee meeting of the Sida/MEM Solar PV Project held in Iringa in the period 21-22 September 2006.