

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

Quarterly Operational Report
For the period
April-June 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 April-June 2006. As in the first quarter the project performance was also affected to some extent due to the late remittance of the funds (remitted only on of May).

Immediate Objective 1 :

Output 1.3: Standards for PV components defined.

Activity 1.3.1: To follow up the adoption of PV standards and code of practice for technicians.

The formulated PV standards and technicians code of practice have been approved by the EAC Technical Committee and it is now being gazetted by the TBS for their practical implementation. Arrangements are made with Sida/MEM project to support TBS during this phase.

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 a series of awareness meetings with regional and district officials on PV applications and benefits .

In two separate meetings the PIU briefed the RC and the RAS on the project profile, objectives, strategies, approaches and achievements.

A meeting was organized for the DEDs, regional and district planning, medical and educational officers, regional cooperative officer and the regional community development officer. The meeting was presided by the Regional Commissioner. The project profile, objectives, strategies, approaches and achievements were discussed. Detailed discussions covered the potential applications of PV systems and its potential developmental roles, especially in off-grid areas. The possibility of incorporating PV in the coming annual development plans were also discussed. The meeting was accompanied by a video show on the PV demonstration sites in schools and health facilities in the districts.

Activity 2.1.2: Organize site visits by key decision makers.

This could not be organized.

Output 2.2: End user awareness program formulated and implemented

Activity 2.2.1: To continue preparation & dissemination of information packages on PV and their benefits; leaflets and news letter .

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. More than 15,000 copies of the leaflets, 200 project calendars and 200 project newsletters were distributed through the ward community development officers to assist in raising the awareness of the beneficiaries in the villages.

The second issue of the newsletter is now under preparation.

Activity 2.2.2: To continue the use of radio and TV for awareness raising.

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.

A special program was organized, on 1st of June, through media on the national environment day. In addition to raising the public awareness on environmental aspects the program emphasised the close relation between energy and environment and the use of solar and other alternative sources of energy and technologies as a way to conserve environment.

Activity 2.2.3: To prepare for the participation in the coming Nane-Nane: Prepare dissemination materials: e.g T-shirts,...

Activity 2.2.4: To print and disseminate the prepared booklet on educational material

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 a number of 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, AOL technology Ltd and Interprofession awarded members of SACCOS on potential uses of PV systems and their respective capital and operation costs.

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.

The installation of the PV demonstration systems continued this quarter. Three systems were installed in Magu at two dispensaries and one health centre.

During this period the project technical team managed to visit six sites in Geita and Sengerema and met with the Health Committees of dispensaries and health centres and signed with them MoU.

Activity 2.3.2: Procurement of cold chain equipment in cooperation with Regional Cold Chain Office - start procurement process

In an effort to maximize the benefits of solar equipment installed earlier in health facilities by different donors, the project conducted an evaluation of the existing cold chain equipment in cooperation with the Regional Cold Chain Office. Arrangements are made also to cooperate with the RCCO to rehabilitate these systems, Within this arrangement the RCCO will rehabilitate the fridges, provide new batteries and ensure the existence of a guard in all these centres. The project will provide the missing PV arrays (4- all being stolen) and provide technical training for the users of these equipment.

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 local TASEA.

The project supported TASEA in organizing the National Solar Energy Day in Dar es Salaam in the period 22-23 June. The project achievements were presented and the PM chaired the session on PV financing. Beside the PM the PC also participated in the w/s and the GM of TASEA.

Activity 3.1.2: To study and discuss alternative service delivery modes

A team of 3 experts are contracted through TASEA, who will prepare a study on PV electricity services delivery modes and will lead the discussions on the delivery modes and roles of various stakeholders in a special stakeholders workshop, expected to be organized towards the end of July.

Output 3.2 : Technical knowledge of PV strengthened.

Activity 3.2.1: Organize a training workshop for school graduates on PV systems basic maintenance-to assist SACCOS involved in financing

A four days training workshop was organized for school graduates(15) on PV systems installation and basic maintenance. This training , second for school graduates, was in the period 26-29 June. This time they were from Sengerema, Kwimba and Mwanza Districts.

Activity 3.2.2: To work with VETA to incorporate the developed PV curriculum

A two days monitoring visit was organized for a team from VETA HQ, headed by the Training Director, to VETA_Mwanza. During these days the team met with the Centre's management, the instructors and had discussions with the PIU and also the students. The objective was to acquaint the new team at VETA HQ with the introduced curriculum and give them the chance to evaluate the performance of the Centre in the introduced solar training. This will be followed by a technical evaluation in July, when the first intake (15 students) will be graduated. The team highly evaluated the course and promised to incorporate it in the national VETA's budget and start a gradual replication in other centres.

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:

Due to management change in the CRDB, Nyerere Branch, and the reluctance of the new management to continue in implementing the arrangements made with the SACCOS, arrangements were made to deal with CRDB-... Branch. Other 5 SACCOS were selected for the pilot phase. These are: Teachers and Chawaki SACCOS from

Magu, Mkombozi SACCOS from Kwimba, Katoro SACCOS from Geita and Murutunguru SACCOS from Ukerewe. The Bank and PIU representatives visited these SACCOS accompanied by private sector technicians. Now arrangements are made for the private sector dealers to meet members of these SACCOS to prepare proposals for financing.

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 the recommended supply-chain financing model.

The start up of this activity could not be started as the draft final report of the study on evaluation of different financing practices and the recommendations of the most suitable model has just been submitted.

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.

The project supported eight PV income generating projects proposed by the private sector, this quarter. They were for phone charging(2), hair cutting saloons(2),one for each of: radio repair shop, guest house lighting and TV, video show and a milk processing facility. These were in Sengerema(2), Kwimba (2), Magu(2), Ukerewe (1) and Ilemela (1). All beneficiaries contributed in the costs of the installed systems. The minimum contribution of the beneficiaries this quarter was 30% of the system costs. These systems were supplied and installed by three PV dealers: AOL Technology Ltd.(5) , Intra Profession Africa Ltd.(2) and Zara Solar (1).

Immediate Objective 5:

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

Activity 5.1.1: Conduct the second survey to assess the impact on rural livelihoods

The questionnaire was revised and prepared. A number of technicians (trained by the project) were contracted through local TASEA to conduct the survey. The objective of this survey is to get updated data for monitoring the project progress, evaluate the impact of PV applications on the rural livelihoods and ultimately adjust the future project workplans.

Activity 5.1.2: Prepare a video documentation

The project has started a series of project activities documentation. The aim is to have enough documented activities for project experience replication purposes. This quarter a number of activities were thoroughly documented. The activities included awareness workshop with district officials, training workshop for PV technicians, meetings between SACCOS, CRDB and the private PV dealers. Out of this a video

video film covering the project achievements and impacts up to June 2006 is now being edited.