

ENERGY FACILITY

**Enabling 18.000 people to access sustainable
small scale solar power in Quissanga and
Ancuabe districts, Cabo Delgado**

IN PARTNERSHIP WITH EUROPEAN UNION



1. DESCRIPTION

1.1. Name of beneficiary of grant contract:

Associação Moçambicana para a Ajuda de Desenvolvimento de Povo para Povo (ADPP);

1.2. Name and title of the Contact person:

Birgit Holm, Executive Director;

1.3. Name of partners in the Action:

Fundo de Energia (FUNAE) from Mozambique, TERI from India and GAIA;

1.4. Title of the Action:

Enabling 18.00 People to access sustainable small scale solar power in Quissanga and Ancuabe districts, Cabo Delgado;

1.5. Contract number:

FED/2011/232-092;

1.6. Start date and end date of the reporting period:

July 2011 to March 2012;

1.7. Target country(ies) or region(s):

Mozambique;

1.8. Final beneficiaries &/or target groups¹(if different) (including numbers of women

1.8.1. Final beneficiaries – 30,000 women, men and children's in Quissanga and Ancuabe districts;

1.8.2. Target group – 18,000 women, men and children and 200 potential entrepreneurs;

1.9. Country(ies) in which the activities take place (if different from 1.7):

2. ASSESSMENT OF IMPLEMENTATION OF ACTION ACTIVITIES

2.1. Executive Summary of the Action

The project implementation started in August 2011 and it counts with one Project Leader, Mr. Eugenio Mangué¹ and ten Area Leaders. This team began its activities through the local project presentation and meetings with local authorities. This activity was followed by the identification of the villages for the installation of 40 LaBLs stations. From October to November 2011 the technical baseline survey took place.

In October 2011 a contract was signed with TERI (The Energy and Resources Institute), regarding the technical assistance and visits that the Indian Institution will provide to ADPP during the 3 years of project implementation. After the contract was finalised the process of importing solar panels from India started in close collaboration with TERI. The purchase order was placed in November 2011 and the consignment arrived in January 2012.

Afterwards the project staff was trained. Mr. Mangué was the first one to be trained, in Maputo, by a TERI technician, on February 2012. The Area Leaders also received an on-site training performed by Mr. Mangué. In March 2012, 18 entrepreneurs were trained by a TERI technician, who was of assistance in the installation of 3 LaBL² stations. So far 14 LaBL stations were established. TERI technician have also conducted a positive evaluation of the project progress.

The first reactions from the population who got access to the lanterns were very positive. The lamps are fully used, and the population has requested for the possibility of expanding the supply of lanterns, as the light provided is better, cleaner and cheaper than the petroleum lanterns and candles which were used before.

The Administrator of Quissanga District volunteered to inaugurate the stations in next April, showing the government commitment with the project.

2.2. Activities and Results

Narrative

¹ Mr. Mangué is the new Project Leader in replacement of Mr. Alberto Amoros, the former one who left the project, in January 2012.

² A TERI global campaign of Lighting a Billion Lives (LaBL), which envisages to bring light into the lives of 1 billion rural people by providing them solar lighting devices that not only provide high quality light and smoke-free indoor environment but also reduce consumption of kerosene and other fossil fuels used for the purpose of lighting in power impoverished areas. ADPP efforts are reaching 18000 people.

ENERGY FACILITY
Small Scale Solar Power in Quissanga and Ancuabe

Activity Number: A1

Activity Title: Project team identification; identification of candidates who will be LaBL entrepreneurs

Description: The Project staff was established in August 2011. The team consists of 1 Project Leader and 10 Area Leaders.

At the start of the project Mr. Alberto Amorós was contracted as project leader, but in January 2012 he resigned, and a transfer of the project was made to Mr Eugénio Mangué. Mr. Eugénio Mangué has a large experience in the construction area, as he has worked for ADPP as a Building Site Leader for more than 20 years, working in the community.

The 10 Area Leaders were selected locally to make the communication with the communities easily and in order to ensure that they fluently interact with their target areas. All the Area Leaders are literate, two with the 9th grade, seven with the 10th grade and one with the 12th grade education. As additional experience eight worked in community development in TCE³ programs and two have formation from Frontline Institute in Zimbabwe⁴, also in community development work. The Area Leaders usually have meetings on a weekly basis and they meet with the Project Leader every Saturday, beside the visits made by the Project Leader to the stations every week. In addition the project counts with 1 administrator and two guards. The accounting is secured by ADPP National Headquarters, which is also of assistance with the supervision of project activities in a quarterly basis. In March 2012, the ADPP National Headquarters visited the project to supervise the installation of LaBL stations.

Activity Number: A2

Activity Title: Project team capacity building

Description: The training of the project team started in February and the Project Leader was the first one to be trained, during 3 days in Maputo City. This training was conducted by a TERI technician and was on the topics of solar panels installation and their positioning in the sun light, lamps charging, care and maintenance and how to repair the equipment. After this training the equipment which had arrived in January was sent to Cabo Delgado and the Project Leader returned to the project, where he trained the Area Leaders and they were able to test the solar panels, lamps and chargers. During this training the Project Staff agreed on improving and strengthening the physical conditions of the houses where the LaBL stations would be installed. The houses will have new doors and windows to avoid the equipment theft and, will also have tables for lamps, chargers, junction boxes and cables.

³ TCE - Total Control of the Epidemic. A community based HIV/AIDS prevention program.

⁴ Frontline Institute runs 6 months courses in Project Management.

ENERGY FACILITY
Small Scale Solar Power in Quissanga and Ancuabe

Activity Number: A3

Activity Title: Procurement

Description: In the application, TERI was already identified as the supplier of LaBL stations. After signing the grant contract with EU⁵, in July 2011, ADPP started and concluded successfully the process of signing a contract with TERI, in October 2011. Afterwards, the negotiation on the order of 31 LaBL stations took place. A purchase order was placed on the 7th of November, and 50% advance payment was transferred. After the consignment was produced TERI controlled everything, and the consignment was sent via airfreight to reduce transport time. The stations arrived to Maputo last week of January 2011. This purchase order included 6 LaBL stations for another project, One World University in Changalane District, Maputo Province. The simultaneous implementation of the 2 projects is an advantage, as they can use the experiences from one another. The LaBL stations are comprised of 2 sets: 2 solar panels of 100 watt, 2 junction boxes and sixty lanterns/lamps and cables for all parts connection. The remaining 9 stations will be purchased in April 2012, in order to have all stations ready for the second phase of the project implementation in Ancuabe District.

Regarding the establishment of the Project Office, a procurement process was also initiated and resulted in the purchase of vehicles like 6 bicycles and 11 motorbikes one of them a Honda XR 125; and office furniture and equipment such as 1 desktop, 1 printer, 1 scanner, 1 digital camera, 5 laptops, 1 furniture set comprising of desks with chairs, cupboard and shelves and 1 meeting table and 15 chairs.

Activity Number: A4

Activity Title: Selection of locations for establishment of LaBL stations

Description: The identification of the villages for LaBL stations installation started in August after the Project Team was established. This process was conducted in strict collaboration with local government authorities and community leaders. A total of 10 villages were identified and selected, namely, 1^o de Maio, Cajembe, Nacoba, Napuda, Muaja, Namange, Indique, N'tapuati, Namaluco and Ntororo. At the moment all 10 villages have 1 to 3 LaBL stations:

District	Quissanga					
Village	Indique	Muaja	Nacoba	Namange	Napuda	1 ^o de Maio
LaBL Stations	3	2	2	3	2	2

District	Quissanga			
Village	Cajembe	Namaluco	N'tapuati	Ntororo
LaBL Stations	1	1	1	1

⁵ EU – European Union.

ENERGY FACILITY
Small Scale Solar Power in Quissanga and Ancuabe

Activity Number: A5

Activity Title: Establishment of Project Office

Description: The Project Office was completely established in Bilibiza at ADPP Teacher Training College. The project areas were chosen due to its location, communication, transportation and accessibility to the project areas.

Activity Number: A6

Activity Title: Project launch locally and meetings with local authorities

Description: The project was launch locally in September 2011, and formally authorized by the Quissanga District Administration in 24th October 2011 with the assignment of implementation authorization letter by the Quissanda District Administration Secretary.

Meetings with the Quissanga District Administration took place in January and February, where the new Project Leader, Mr. Eugénio Mangue was presented, and monthly reports were asked by the District Administrator. Meetings with the authorities in each village where the stations are being implemented happen every month.

Activity Number: A7

Activity Title: On-site training of project staff by TERI's technical support team combined with village selection LaBL Scoping Study.

Description: This activity started in February when the process of LaBL stations order was completed and they were available in Maputo. The Project Leader was the first one to be trained in Maputo, by a TERI technician and then he went to Cabo Delgado, where he trained his staff, the 10 Area Leaders. In March, the Area Leaders took part in a recycling training of 3 days conducted in Cabo Delgado by another TERI technician, who has also evaluated positively the results reached so far. This last training session was exciting because it included the installation of 3 LaBL stations. And after this the Project Staff was able to pursue the installation of 15 more LaBL stations.

Activity Number: A8

Activity Title: Training of 40 charging station entrepreneurs

Description: The TERI technician provided this training session in March 2012 and 18 entrepreneurs took part of it and gained skills on installation of the solar panels, maintenance of solar panels, lanterns and junction boxes, and registration of the lanterns.

Activity Number: A9

ENERGY FACILITY
Small Scale Solar Power in Quissanga and Ancuabe

Activity Title: A technical baseline survey and impact assessment to be executed by sub-contractor

Description: The Baseline Survey was conducted from October to November 2011. The data collection was led by the former Project Leader, Mr. Alberto Amoros. Subsequently a data analysis was made by ADPP Grant Administration. The baseline survey comprised of interviews of 100 people living in the villages where the LaBL Stations will be set up.

The main conclusion was that people need a safe and affordable quality light to improve their livelihood and that there is an economical base for the fee to be paid for recharging lanterns. The baseline survey is attached.

Activity Number: A10

Activity Title: Installation and running of LaBL stations

Description: The installation of LaBL stations started in March 2011, with 3 stations being installed by the TERI technician while training the Area Leaders. There are now 18 LaBL stations spread in 10 villages. These stations are managed by 36 LaBL entrepreneurs, 2 in each station, with the supervision of the Area Leaders.

The project was well received by the population. The 60 lanterns at each station were distributed to the beneficiaries, with written contracts establishing the rules of use and payment. After few weeks of implementation, many people said they prefer to pay a monthly fee that covers all the recharges of the month. This is better, as it requires less bureaucracy. The families are using lanterns for all the expected purposes: children are doing home work, women can do house hold chores, shops can be held open during the evenings, and other income generating activities can also continue in the evening, such as sewing and basket weaving.

It is too early to draw any conclusion on the impact of the people's lives and economic development in the community, but it is clear that the lanterns are well received.

An analysis will be made, to count the number of beneficiaries in average of each lamp. Although the average family size is 4.5 people, we expect that the number benefitting from each lantern is more, as shops are open benefitting many people, and single men will share the light with more people. But this is still an assumption, which must be investigated

As the total equipment has cost less than what was expected in the budget, we are planning to introduce other solar lighting equipment, such as a system to provide ceiling light for the primary schools in the villages. This will enable adult education to take place in the evening, an option which is impossible without good light, but highly appreciated, when possible.

Some case stories are annexed to the report.

3. Partners and other Co-operation

3.1. How do you assess the relationship between the formal partners of this Action (i.e. those partners which have signed a partnership statement)?
Please provide specific information for each partner organisation.

Tip:

Consider the following headings:

Partner Name: TERI

Expected Role during Implementation: Establish the contact with the provider of solar energy equipment

Control the equipment before it is shipped.

Provide training of the project staff and Energy Entrepreneurs in the installation and maintenance of the LaBL stations.

Fulfillment of that Role: TERI has successfully established the contact with the supplier, Global Telelinks, a company based in Hyderabad, India. The first training was conducted actually not by TERI personnel, but by an engineer representing the supplier. This was very important for us to fully understand the potential of the equipment, and also to introduce other possible solar charging equipment, that could be used for the purpose of this project.

After the equipment had arrived, TERI has sent a Technician Mr. Arvind, to assist in the first installation of the equipment in Cabo Delgado. This was an important visit, as Mr. Arvind suggested changes to the way we had planned to keep the solar panels – instead of fixing them to roof tops, they were placed on skeletons, as explained in the report.

TERI will continuously be monitoring the development of the project and supporting ADPP with technical expertise. The project leader Mr. Mangué is scheduled to visit TERI, to learn from their experiences.

Partner Name: GAIA

Expected Role during Implementation: Support the project with 20.000 EURO

Fulfillment of that Role: 20.000 EURO has been transferred to the project.

Partner Name: FUNAE

Expected role during implementation: to participate in the selection of district where to implement the project.

Fulfillment of that Role: FUNAE has actively agreed with a substantial change of the placement of LaBL stations. Since the project proposal was handed in to EU, the national grid has been extended to Quissanga District, to the main towns. This has affected the relevancy of establishing solar energy projects in these towns. The project is still relevant in the villages which are not connected to the national grid, but the number of possible beneficiaries was reduced due to this change.

Therefore a part of the project (22 out of 40 stations) will be implemented in another District, Ancuabe. This has been agreed with FUNAE, and subsequently also agreed with the European Commission.

3.2. How would you assess the relationship between your organisation and State authorities in the Action countries? How has this relationship affected the Action?

Tip:

Consider the following headings:

State Authority: the Administration of Quissanga District

Expected Role during Implementation: The project informs the District administration about the activities taking place, and the Administration approves of the plans.

Progress & Challenges: the Administration is very positive about the implementation of the project, as this is an important element regarding the development of all villages in the District. The Administrator has accompanied the installation of the stations, and will also make an inauguration event.

3.3. Where applicable, describe your relationship with any other organisations involved in implementing the Action:

Tip:

Consider the following headings:

Organisation:

Nature of Relationship: Associate(s), sub-contractor(s), final beneficiaries and target groups, and third parties involved (including other donors, other government agencies or local government units, NGOs, etc)

N/A

Role during Implementation:

Progress & Challenges:

3.4. Where applicable, outline any links and synergies you have developed with other actions.

Tip:

Synergies may include combining an intervention funded by another donor, e.g. awareness raising regarding clean water and more energy efficient ways to boil

ENERGY FACILITY
Small Scale Solar Power in Quissanga and Ancuabe

water, interventions implemented by other organisation, addressing behavioural change as a whole.

This project is being implemented in an area, where ADPP is also implementing another project, Farmers Clubs. The Farmers clubs are projects that train farmers in sustainable farming methods and commercialization of their crops. The solar energy project is supplementing this effort, as farmers will be able to use the evening hours in productive ways because of better illumination. The element of training 200 entrepreneurs is collaborating well with the Farmers club project.

3.5. If your organisation has received previous EU grants in view of strengthening the same target group, in how far has this Action been able to build upon/complement the previous one(s)? (List all previous relevant EU grants). N/A

Proposed Layout

This can be provided in a tabular format as shown below:

Contract Number	Grant Title	Complimentarity with Current Project

4. Visibility

How is the visibility of the EU contribution being ensured in the Action?

Tip:

- Include pictures
- Remember visibility is not only about use of logos but also referring to the support provided by the EU in speeches, meetings, and gatherings.

A poster with rules about the use of solar lanterns has been distributed to all solar charging stations. This poster includes the logo of EU. All Energy entrepreneurs as well as the District Administration know that the project is financed by EU.

For the next period, signs for each solar charging station will be produced, which also informs about the EU financing.

ENERGY FACILITY
Small Scale Solar Power in Quissanga and Ancuabe



The Solar energy stations have a junction box, where the lanterns are being charged. The lanterns are lit for demonstration purpose, as of cause they will not be lit during charging. The poster on the wall includes the EU logo.

The European Commission may wish to publicise the results of Actions. Do you have any objection to this report being published on the EuropeAid website? If so, please state your objections here.

We don't have any objections of publicising the results of the action.

Name of the contact person for the Action: Birgit Holm

Signature:

Location: Maputo

Date report due:

Date report sent: