



**Sierra Leone**

**Community Based Organization**

In Cooperation with



**PROSJEKTITTEL: »Lys oppBonthe  
Bendu Cha Chiefdom**

**Project Report – SLCBO project of Solar Kiosk**



**Solar panel and lamps with mobile charging facilities**

### **Introduction**

SLCBO is a community based organization aimed at improving the lives and conditions of the poor in communities in Sierra Leone through the provision of good, safe, cheap and effective source of energy as one of the key priorities.

## Launching of New Solar Lamps

### Solar Kiosk

In our drive and determination to improve the life of the people in the Bonthe community, SLCBO started a solar project with the introduction of five solar lamps in the community in 2012 which were donated by Solenergi Uten Grenser – Solar Energy without Borders from Norway. This became an immediate success within the Bonthe community. As a natural follow up, Solenergi Uten Grenser sponsored a Solar Kiosk concept by Solar Zonder Grenzen of Belgium through a close cooperation. They helped train and equip the organization with Calabash lamp made partly from local material. Initially, the Calabash Lamp was highly appreciated by the end users in Bonthe. But as time went by however, some of its flaws began to reveal themselves. Key amongst the weaknesses of the Calabash Lamp was that the duration of its lighting. When fully charged the Calabash Lamp lights for about four hours. It also has the weakness of fragility as well as its limitation to only giving light.

In order to address some of the concerns associated with the Calabash Lamp, SLCBO introduced self-designed LED based solar lamp with its advantage of long lighting duration, ability to dim and charge mobile phones.



*School children proudly displaying their new solar lamps*



*SLCBO member comparing the calabash lamp to the solar lamp*

On the 13<sup>th</sup> March 2016 SLCBO travelled to Bonthe Island with an improved version of solar lamps. This version was designed to address the numerous concerns raised by the customers and users of the previous version of solar lamp (also referred to as calabash solar lamp). Some of the concerns raised include:

- That the lightening duration of the calabash lamp is relatively short
- That the plastic covering at the top often gets wrinkle thereby further reducing the brightness of the lamp
- That the calabash structure is easily breakable.
- The new solar lamp which has a lightening duration of 4 to 16 hours is much brighter and more durable. It also has the facility of charging cell phones.



On arrival in Bonthe, a meeting of local authorities and customers was convened during which the advantages of the new solar lamps were highlighted. This was met with great appreciation from the users of the previous solar lamps especially as most of their concerns were yielded to in the designing of the new lamp. Most of the users of the lamps expressed their desire to continue with the project as it has immensely contributed in improving their source of energy as well as increasing their savings. One of the users maintained that this new light with a mobile charging facility will even be of more help to them. We concluded the meeting the launching of the newly modified solar lamp kiosk.



*Customers examining the solar lamp*

## Analysis of solar lamps received as per Chiefdoms

Chiefdom	Date	Total Lamps	Remarks
Bendu Cha	13 <sup>th</sup> March 2016	110	Lamps are being rented
Dema	29 <sup>th</sup> September 2015	125 + 15	Lamps are being rented
Sittia	April 2014	110 +20	Lamps are being rented
Bonthe town	2012	120 +50	Lamps are being rented

**NOTE:** Solar Zonder Grenzen of Belgium helped build the 120 lamps for rental through the Solar Kiosk project in 2012. The remaining total that we reached = 430 lamps are new lamps designed by SLCBO. That makes the grand total of 550 lamps.



*At the local FM 96.1 Radio Bontico*

Following the holding of the successful meeting with the solar lamp customers, we also held a radio discussion at the local FM 96.1 Radio Bontico. During the discussion, we informed and sensitized community members in relation to the positive effects of using a solar lamp. We explained the advantages it will have on school going children as well as in increasing the savings of the less privileged.

Prior to our departure, more than 60 customers have already registered with the kiosk. The new solar lamp has proven to be highly efficient and effective and has been met with significant appreciation by its end users. It has succeeded in providing not only lighting for the people but has also reduced their dependence on commercial mobile charging centres and thus giving them savings in their family budgets.



*Customers waiting to get their solar lamps*

In addition to the solar lamp project, SLCBO has also successfully installed solar water well in Bonthe to help alleviate the acute water shortage in the township. This solar water well has provided access to safe drinking water to children of primary schools who otherwise would have to trek substantial distances to fetch water albeit unsafe.



*A child fetching water from the solar well*

Manual hand pump wells have also been rehabilitated within the Bonthe township and surrounding villages. A total of seven hand pump wells are now serving the township thereby significantly contributing to alleviating the water crisis in the community. SLCBO intends to increase the number of solar well by providing solar equipment to most of the other rehabilitated wells. This is reduce the burden of pumping water from the wells especially as this activity is largely done by women and children. As SLCBO aims at mitigating the suffering of women and children, we believe that increasing the number of solar wells will help reduce the burden of pumping water on particularly children.



*Children eagerly pumping water from one of the manual hand pumps*

## **Future Solar Project**

As a result of the successful implementation of the solar lamp project, SLCBO intends to expand the facility to other communities outside the Bonthe Municipality. Since 2012 SLCBO has so far supplied more than 550 solar lamps in several phases mostly supported by funding from Solenergi Uten Grenser. These lamps have proven to be very essential and have positively contributed to changing lives of the people of Bonthe Island. SLCBO wants to reach its target of 1000 households with and continues to focus on the most vulnerable communities. This is essential bearing in mind that most of the

surrounding communities lack a durable lighting facility. With the majority of residents within the community being fishermen, the newly modified solar lamps will no doubt contribute to enhancing their livelihood. Solenergi Uten Grenser has committed to help SLCBO to find funds to reach the goal of 1000 households. We are already on our way with more than 50% on target. Only 450 households left.



The Waiima village within the Sittia Chiefdom has been identified as the next centre to establish a solar kiosk. Waiima village and its surrounding have a population of about 1,000 people. The entire community has three primary schools with a population of about 135 pupils. Establishing a solar lamp in these communities will significantly encourage and motivate pupils to study while at the same time give opportunity to parents to charge their cell phones and facilitate their fishing business.



## Appreciation

On behalf of SLCBO, Bonthe Municipality council, staff and pupils, community elders and women, we wish to extend our sincere thanks and appreciation to Solenergi Uten Grenser - Solar Energy Without Borders and through them all the well-wishers of SLCBO for their contribution in improving the livelihood of the people of Bonthe Township. It is our profound determination to ensure that we will continue to work hard to utilize the resources given to us in the best interest of the people of Bonthe.