

## *Save the Environment Ethiopia*

### **Project title:**

*Promotion and Community Based Production of Biodiesel in Deneba and Elbahay Kebeles of Somali Region*

### **Project Commencement:**

- *Date 15 August, 2012*

### **Duration of the Project:**

- *12 months*

*Report from August 15 2012 – October 31, 2013*

### **Project area**

*The project is located in Somali regional state, Fafen Administrative zone, Deneba Kebele (located in Kebribeyah district) and Elbahay Kebele (located in Jijiga district)*

*Extensive animal rearing and sedentary farming is the major source of livelihood which has resulted in deforestation mainly for household energy. There is a serious lack of sustainable household energy since the natural vegetation has disappeared.*

### **Goal**

*The primary goal of the project is to promote safe, clean and eco-friendly alternative energy from biodiesel through community-based small-scale production and use Biodiesel from Castor bean and Jatropha*

### **Objectives**

- I. To assist 200 households to use bio-diesel from castor bean and Jatropha as a sustainable and eco-friendly household energy*
- II. Improve the knowledge, skill and attitude of the community aimed towards bio-diesel*
- III. Establish market linkages to enable household to gain income from sale of extra produce of biodiesel*

### **Expected Output at the end of the project**

- *200 households will cultivate and use castor bean as a source of household energy (cooking and lighting)*
- *The same households will use Jatropha as a biological fencing and use the seed biodiesel*
- *Target group will gain additional income sale of extra produce of biodiesel through established market*
- *The community will be aware and interested for using bio-diesel as a replacement for fuel wood*

### *1. What did you do? Activities:*

- *Assisting Target group to start producing and using biodiesel*
- *Promotion of biodiesel and community awareness*
- *Recruitment and deployment of Energy Expert*

### *2. What, if anything, has changed throughout the project period? Progress against Planned Objectives:*

#### **Main activity 1. Assisting Target group to start producing and using biodiesel**

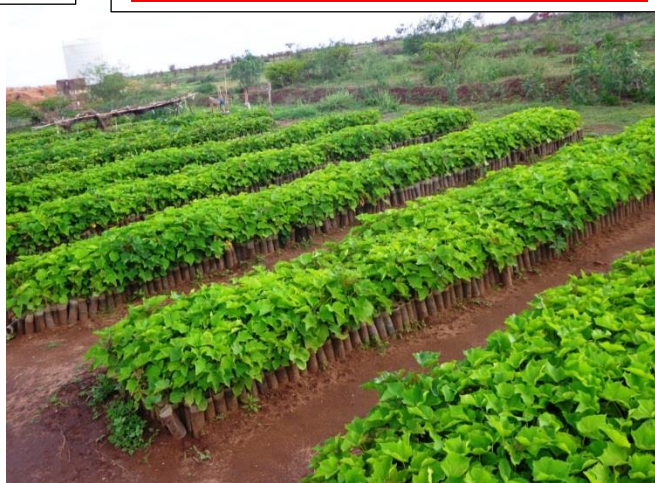
*Seeds of Castor bean were distributed for 200 households of the two kebeles which was cultivated in plots of nearby established farmlands. They were assisted with seeds and ploughing of their land. Continuous care, collection of oil seeds and extraction of oil will be the responsibility of the beneficiaries. Before they start cultivation, orientation sessions were organized on cultivation methods and collection of seeds. During selection process of beneficiaries, priority was given to women headed, and large family sizes. Furthermore 80,000 seedlings of Jatropha were produced in both Shedder and Kebribeyah refugee camp nurseries. The produced plants have been distributed to the beneficiaried with orientation to target group who have cultivated castor bean. The Jatropha seedlings are to be planted as biological-fence and to be used as oil seed to supplement their production.*

*On the other hand, process is ongoing with ministry of Energy to create a market link for castor bean seed collected from the farms of the beneficiaries. Therefore, the growers will get their income from their produce. The following two photos will show the planted castor bean on the farm of the project beneficiary and the Jatropha seedling raised in kebribeyah nursery.*

**Castor planted by the project beneficiary in Elbahay**



**Jatropha seedlings produced in KB nursery**



## ***Main activity 2 .Promotion of biodiesel and community awareness***

*Community awareness was the other component of the project for improving the knowledge of the community towards production and utilization of bio-diesel through orientation workshops for beneficiaries, use of IEC materials and use of media. Thus, 8 Community mobilizers were recruited and trained to mobilize the community and implement the project activities at the ground level. Moreover, a workshop was prepared in Jijiga town with participants from regional stakeholders, NGOs, district experts, Kebele administration and beneficiaries. Again, a paper was also presented by AAU/HOAREC and Ministry of Water and Energy on the national policies towards biodiesel, the technology and application in Somali Region. The oil pressing machine and bio-diesel stoves were also demonstrated to participants and the media.*

*To demonstrate and promote the stove to the community, 5 households were trained and provided with the stoves to be used in their houses.*



## ***Main activity 3. Recruitment and deployment of Energy Expert***

- *One qualified energy expert was recruited for Jijiga office who is a focal person of the project*

## ***Main activity 4 .Requesting budget amendment***

*Even though, there was a plan to assist the target groups with oil pressing machines and modern bio-diesel stoves, we failed to do so due to the following two major reasons. Initially, Bako Research center which designed and produced castor bean seed pressing machine claimed that metal required was not available in the market and workload to produce the machines for our project. Latter, they have been instructed by the Ministry of Water and Energy to redesign the machine to introduce more strength to it. On the other hand, the only institution which imports biodiesel stove is AAU/ HOAREC and we have partnership agreement to work together. At the start of the project, the institution was importing stoves. Now, importing has stopped and they have started construction of the factory to produce the stoves locally which might take long time. As a result of the above mentioned challenges we have only used about 70% of the first installment (which is less than half of the total project budget).*

*Therefore, due to these challenges and continuous discussions with project beneficiaries and Stakeholders we have agreed to modify the approach meeting all the objectives. Thus, the project named " Solar Electrification of Deneba and Elbahay Kebeles of Somali Region " were the modified project proposed to be implemented in the two Kebeles.*

*The Goal of this project is to improve the livelihood of semi-pastoralist communities of Deneba and Elbahay Kebeles through introducing Solar Energy for lighting and contributing to mitigate the environmental degradation for household energy. The project meets all goals and objectives of the previous approach. Thus, we have amended the project budget from bio-diesel stove and pressing machine in to solar light electrification.*

### **Goal**

The Goal of the new project is to improve the livelihood of semi-pastoralist communities of Deneba and Elbahay Kebeles through introducing Solar Energy for lighting and contributing to mitigate the environmental degradation for household energy.

### **Objectives**

1. To reduce deforestation for household energy and improve the livelihood of the community by introducing alternative eco-friendly household energy from Solar for 110 households
2. To build the capacity of the community on solar system management and operation

### **The specific results or outcomes**

- Pressure on the natural vegetation reduced through introducing solar energy for lighting of 110 households and the nearby local institutions.
- Livelihood of 110 households improved through introducing solar energy
- Capacity of the community on solar system management and operation build

Thus, the progresses against planned activities for the new project are discussed as follows.

### **Activity 1 Purchase, transport and installation of Solar System for 11 clusters (110 households & public offices)**

Eleven set of solar equipments have been purchased, transported and installed for 130 household beneficiaries of Elbahay and Deneba kebeles. The following photo revealed Deneba household with solar light.



11 sets of solar equipment purchased and transported to the project site. For easy installation, assessment of fitting area has been conducted by the supplier. Accordingly, solar energy introduced for 130 HHs in 11 clusters and public offices (Kebele and other public institutions) of Elbahay and Deneba kebeles. One solar management committee who has six members was established.

Moreover, the community organizes solar inauguration ceremony that comprises Somali tradition food and cultural dance. During the event, environmental messages were also channeled through motivational speech delivered by influential persons from the communities and invited guests.

After, the installation of solar system completed, training on minor maintenance and operation of solar system was conducted for selected individuals.

Finally, the community of Deneba and Elbahay kebeles appreciate and acknowledge what SEE has made for them. For example, Ato Abdi Mohamed Rage explained that the community were suffering a lot before the introducing of solar light. As he said, the negative impact on environment and the related health problem that associated with “kuraz” and “fanos” was deteriorating the life of the community. He also added that students will study their education in a better way than before and they improve their educational achievements due to the solar light introduced for them. Therefore, he appeal to the invited guests to increase the coverage of solar light for the remaining portion of the communities.

## **Activity 2. Training on minor maintenance and management of solar system**

Training on minor maintenance and management of solar system has been given for 11 persons from both Deneba and Elbahay Kebeles of the project site.

### ***3. Changes in Internal and External Environment***

- *Delay in the production of oil pressing machine by Bako research center*
- *importing bio-diesel stove has stopped by AAU/HDARECN*
- *very short time to amend the project budget*
- *difficult to get local market for collected castor bean seed*

### ***Efforts made to overcome***

- *Continuous discussion and follow-up with Bako research center and HDARECN*
- *Continuous discussion with the project beneficiaries and other stakeholders to amend the project budget and on the fate of the remaining part of the budget.*
- *Process is ongoing to create market link for collected seed of castor bean.*

### **4. Recommendations and Future Plans:**

- The community of both Elbahay and Deneba kebeles are extremely requesting to introduce the remaining households with solar energy.
- Since the region is with high population growth and high dependency on firewood for energy consumption, the impact on environment is devastating. Therefore, your intervention in the area is very important.
- Strong support should be in place from the Ministry of Energy to create market link for castor producers

- Keep your existing support up to alleviate the multi-faceted environmental problem that prevailed in the region.

#### 5. Lessons Learned:

- The Persistence and supportive approach from CSSP side makes us very sharp. Accordingly, we have learned how to modify our approach when our project is at risk and how to make the active project successful..

#### 6. Expenditures to date:

- The organization has received ETB 718,300.00 from the project donor and hence the entire budget has been expended for the intended purposes.

#### 7. Declaration of compliance to 30/70 and 10/90:

- There is a high demand of an expert legal advice about the compliance with the Charities and Societies Law and its directives.

#### 8. Any other Information you would like to share

- *Keep up your patience and supportive approach to the CSOs and the hard to reach.*