

## PROJECT DESCRIPTION

|                                       |   |
|---------------------------------------|---|
| <b>Project title:</b>                 | Provision of Safe and Clean Household Energy in Refugee Camps of Benishangul-Gumuz Region |
| <b>Budget Year:</b>                   | 2015  |
| <b>Situation(s):</b>                  | 1900 - ANNUAL BUDGET EXCOM  |
| <b>Operation:</b>                     | Ethiopia  |
| <b>Population Planning Group(s):</b>  | 1ETHG; Refugees and asylum seekers from Sudan in Western Ethiopia                         |
| <b>Goal(s):</b>                       | Protection pending solutions  |
| <b>Cost Centre(s):</b>                | 12066   |
| <b>Partner Code:</b>                  | 1073038   |
| <b>Project Implementation Period:</b> | 1 July 2015 – 31 December 2015  |

### 1.0 PROJECT OVERVIEW

#### 1.1 Project Statement

About 100 % and more refugee households (mostly women and children) will have access to alternative household energy at Tongo and Bambasi refugee camps. Moreover, Gaia will start the implementation of ethanol project in 130 refugee households at Sherkole, Thus, the availability of alternative household energy in these camps will relieve refugees from the burden of fuel wood collection. In addition to this, in the near future Gaia will scale up the ethanol provision at Sherkole and other camps depending on the availability of funds

#### 1.2 Operational Context

Gaia started the project implementation after the smooth handing over of project assets and facilities and assigning project staff, key incentive and national staff working on the fuel provision. The plan for the project was Gaia to start kerosene fuel distribution at Tongo and Bambasi camps and Ethanol fuel for Sherkole camp from July 2015 on. However due to the long kerosene procurement process by UNHCR, distribution of kerosene at Bambasi and Tongo was delayed and started on September 2015 . Gaia facilitated the first batch of ethanol fuel transportation for Sherkole camp and start distribution at the beginning of October 2015.

#### 1.3 Problem(s), Objective(s) and Intended Impact

Refugee in the three camps used to collect firewood and purchase charcoal for their daily household energy use. By doing so, the environment is highly affected by deforestation. Women and children who are responsible for the tedious work of collecting firewood were exposed to harassment and the health effect caused by emissions from cooking on a biomass fuel. Through the implementation of the alternative household energy by Gaia Association , women and children are no longer suppose to walk long distances for collecting firewood and has also impacted on reducing environmental degradation of the areas and has improved refugees' health condition. So far 42,840liters of kerosene fuel is distributed in Tongo and Bambasi camps for 6,542 households and 4,120liters of ethanol fuel at Sherkole camp for 130 households.

## 2.0 POPULATION OF CONCERN/OTHER SUPPORTED ENTITIES

### 2.1 Project's Population of Concern

The total number of population in the three camps has decreased by 6,980 individuals. The change is mainly attributed to the ongoing resettlement program and due to intermarriage in the camps. These changes in population number have not affected the project greatly but it has decreased the total amount of fuel distributed to the camps.

### 2.2 Demographic Data

| <b>Population Planning Group:</b> |                   | < Refugees and asylum seekers from South Sudan in Western Ethiopia > |                   |               |                   |             |
|-----------------------------------|-------------------|--|-------------------|---------------|-------------------|-------------|
| <b>Sub-group (if applicable):</b> |                   | N/A  |                   |               |                   |             |
| <b>Age Group</b>                  | <b>Male</b>       |  | <b>Female</b>     |               | <b>Total</b>      |             |
|                                   | <b>in numbers</b> | <b>in %</b>  | <b>in numbers</b> | <b>in %</b>   | <b>in numbers</b> | <b>in %</b> |
| 0-4                               | 4856              | 20.60%   | 4612              | 21.5          | <b>9468</b>       | 21.04       |
| 5-17                              | 9061              | 38.45%   | 7748              | 36.13         | <b>16809</b>      | 37.35       |
| 18-59                             | 8977              | 38.09%   | 8440              | 39.35         | <b>17417</b>      | 38.70       |
| 60 and >                          | 670               | 2.84%  | 644               | 3             | <b>1314</b>       | 2.92        |
| <b>Total:</b>                     | <b>23564</b>      | <b>52.35%</b>  | <b>21444</b>      | <b>47.64%</b> | <b>45008</b>      | <b>100%</b> |
| <b>Major Sites:</b>               |                   | SHERKOLE, TONGO, BAMBASI   |                   |               |                   |             |

UNHCR Asosa as of 31 December, 2014

### 2.3 Other Supported Entities

N/A

## 3. IMPLEMENTATION ARRANGEMENTS

### 3.1 Implementation

As planned, kerosene fuel distribution has undertaken at Tongo and Bambasi camps for a total of 6,542 households and distribution of ethanol fuel for 130 selected vulnerable households at Sherkole camp. However, due to the long process for kerosene fuel purchase by UNHCR, kerosene fuel distribution was delayed. In order to overcome this problem, Gaia transferred 21,700 liter of kerosene fuel stored at Sherkole camp to Bambasi camp and distributed by setting a revised fuel distribution norm in collaboration with UNHCR and ARRA in order to satisfy full scale household energy need. Following this, Gaia received 48,076 Litter of kerosene at Bambasi and 21,020 liters at Tongo camps on November 2015. Distribution of Kerosene at Tongo camp is completed and second round fuel distribution at Bambasi is ongoing.

For the new ethanol stove provision program at Sherkole camp, Gaia selected one hundred vulnerable refugee households in collaboration with ARRA, UNHCR and RCC members and distributed 100 ethanol stoves, jericans and pitchers. Gaia provided the necessary training on

ethanol stove use, ethanol fuel handling and safety measures for the new stove recipients and refreshment training for the previously selected thirty households. Gaia has transported the planned 31,824 liter of ethanol fuel to Sherkole camp in October 2015. The steel tanker at Sherkole camp which used to store kerosene fuel was cleaned and rinsed with Caustic Soda to use for ethanol storage. To ensure safety, Gaia has also installed a fire extinguishers in all camps. So far, 4,120 liter of ethanol is distributed at Sherkole camp for the new and previously selected 130 households. Distribution of ethanol is going smoothly at Sherkole based on family size.

### **3.2 Risk Management**

A possible risk to the project was ethanol supply interruption from the sole government owned sugar factories but Gaia has secured ethanol fuel supply at Sherkole camp for one year for the selected 130 vulnerable refugee households. For scaling up the ethanol fuel provision at Sherkole camp, the likelihood of ethanol fuel shortage is very low considering the current expansion of sugar factories in the country.

Palatability of the alcohol fuel by refugees was a potential risk to the program but Gaia ensured the ethanol fuel is denatured in the factory before transporting it to the camp. A “sky blue” dye is used to colour the ethanol and the chemical agent “bitrex” is used to bitter the ethanol and make it unpalatable.

### **3.3 Coordination**

Gaia Association has a close and effective coordination with its partners ARRA and UNHCR at camp, zonal and headquarters levels. Gaia regularly consults its project partners for each and every project implementation activities by organizing different meetings and participates in the monthly and other coordination meetings at Camp and Zone levels with other implementing partners. Gaia closely follow the refugee community and has build a close and smooth relationship with the refugee central Committee (RCC) at each camps.

### **3.4 Review and Reporting**

Gaia Association regularly delivers monthly progress report at camp level and quarterly report to UNHCR and ARRA at zonal and head quarters. Gaia has clearly marked all vouchers; purchase orders and services provided under the sub-project partner agreement number, cost centre, 12065, implementer 1073038 and Budget code/Account before authorization of payments are made. Gaia head office has undertaken frequent travel to the camps and ensured the smooth implementation of the project and evaluate its outcome.

### **3.4 Visibility**

The project contributed in maximizing the security of women and children who are inevitably exposed to harassment while fuel wood gathering. By providing kerosene & ethanol for vulnerable 130 households the project has minimized the demand for firewood collection which favourably reduces the resource based tension among the community and maintain the degraded environment.

**3.5 Other**  
*N/B*

## **4.0 RELATED INPUTS AND PROJECTS**

**4.1 Partner**

Gaia has made a fundraising effort and secured a fund from its sister organization Project Gaia Inc (PGI ) for scaling up the ethanol CleanCook stove supply at Sherkole camp. Gaia with the support of PGI contributed around ETB 372,342.00 and provided hundred ethanol stoves for Sherkole refugee camp in addition to the 30 flat pack ethanol stoves distributed for testing in 2014. Safety materials production and distribution, carbon credit program development, contribution to personnel administration, operation and support are other contribution to the project.

**4.2 Other Parties**  
*N/B*

## **5. UNHCR PROVIDED SUPPORT**

The regular follow ups and consultations provided by UNHCR at camp, zonal and headquarter level has greatly helped Gaia for the smooth and effective implementation of the project activities such as in the revisions of kerosene fuel distribution norm at Bambasi and Tongo camps. UNHCR at head quarter and zonal level has supported Gaia on facilitating the procurement and supply of kerosene and ethanol fuel for the camps. UNHCR Assosa-Sub office has also played a great role on the transferring the 21,700 litter kerosene fuel from Sherkole camp to Bambasi camp through assigning vehicle and providing other necessary support.

## **6. CONCLUSION/LESSON LEARNED**

In implementing the alternative household energy program at Assosa refugee camps, Gaia Association has learned a lot some of them are;

- The Household Air Quality Assessment results at Sherkole camp shows a significant reduction in indoor air emission levels after refugees start using ethanol fuel which has a great impact on improving the health of the refugee households.
- The ethanol program in Sherkole has a high acceptance by refugees which urges the need to scale up the program to reach more houses.
- The need to promote different energy saving cooking practices together with the safety precautions in the camps is high to ensure efficient energy utilization.
- Using clean household energy has a great impact on reducing the burden and harassment on women and children caused by travelling long distance and collecting firewood.
- Provision of alternative household energy at the camps relived young girls from the time taking and teddies work of collecting and cooking on firewood and enabled them to attend school.

## **7.0 RECOMMENDED ACTION PLAN FOR IMPROVEMENT OR REVISION REQUIRED**

Gaia Association is planning to fully scale up provision of ethanol fuel at Sherkole camp in the coming years .Moreover, in the near future Gaia is planning to substitute the kerosene fuel provision at Tongo and Bambasi by ethanol fuel.

## 8.0 ACTUAL PROGRESS ACHIEVED TOWARDS PLANNED RESULTS

| Results Chain  |   |  |
|--|---|--|
| <b>Population Planning Group:</b>  | Refugees and asylum seekers from Sudan in Western Ethiopia  |  |
| <b>Goal:</b>   | Protection pending solutions  |  |
| <b>Rights Group:</b>   | Basic needs and Essential Services  |  |
| <b>Objective Name</b>  | 417 – “Population has sufficient access to energy”  |  |
| <b>Problem Description:</b>  | <ul style="list-style-type: none"> <li>▪ Refugee households have scarce source for clean and safe household energy.</li> <li>▪ Women and children are exposed to harassment while fuel wood gathering.</li> <li>▪ Households are highly exposed to indoor air pollution.</li> <li>▪ High resource related tension between local and refugee community.</li> </ul> |  |
| <b>Intended Impact:</b>  | Refugees are able to acquire safe and clean fuel with appropriate appliance for household consumption. Women and children are free from firewood gathering which contribute to participation in IGA. Improvement of indoor air pollution and minimize resource-based conflict among local and refugee community.  |  |
| <b>Actual Impact:</b>  | <ul style="list-style-type: none"> <li>▪ Refugee households relieved from firewood collection.</li> <li>▪ Households provided with safe fuel based on family size.</li> <li>▪ Indoor air pollution reduced.</li> <li>▪ Reported conflict cases to RCC reduced.</li> </ul>   |  |
| Impact Indicator(s)  |   |  |
| Impact Indicator Name  | Site/Location   | Actual   |
| <ul style="list-style-type: none"> <li>▪ Population has sufficient access to energy</li> </ul> | <ul style="list-style-type: none"> <li>▪ Bambasi, Tongo</li> <li>▪ Sherkole</li> </ul>  | <ul style="list-style-type: none"> <li>▪ 100%</li> <li>▪ 2%</li> </ul> |

| Output                               | Status Update on Progress Achieved  |
|--------------------------------------|---|
| <p><b>Domestic fuel provided</b></p> | <ul style="list-style-type: none"> <li>▪ Gaia Association started implementing safe and clean household energy at Bambasi, Tongo and Sherkole camps since July/2015. A Project Coordinator at Headquarter, Two field coordinators and a store keeper at the camp levels were hired as per the sub-project agreement..</li> <li>▪ Properties and project facilities handing over for smooth implementation of the project were undertaken smoothly from ARRA to Gaia in all the three camps.</li> <li>▪ Training of trainers on safe stove &amp; fuel handling has been given for Gaia's community Workers Supervisors and Bottlers. Ethanol stove use demonstration and safe stove handling trainings were provided for 100 new stove recipients and refreshment training for 30 previously selected households at Sherkole Camp. Every household is also provided with safety instruction manual prepared for ease reference at home.</li> <li>▪ Gaia in collaboration with ARRA, UNHCR and RCC selected 100 beneficiaries based on UNHCR vulnerability selection criteria at Sherkole for ethanol stove and fuel program. These households were provided with single burner stoves. To ensure safe ethanol storage at household level all these households were provided with Jerry Cans and pitchers. To date a 130 households with a total of 797 individuals are benefiting from the safe ethanol program at Sherkole.</li> <li>▪ A total of 31,824lit. of ethanol fuel procured from Ethiopian Sugar Corporation and transported to Sherkole camp, so far, 4,120lit. of ethanol is distributed for the 130 households based on their family size.</li> <li>▪ The 21,700litters of kerosene stored at Sherkole was tracked to free the space for ethanol storage. The same amount is distributed at Bambasi for 3,944 households</li> <li>▪ At Tongo, for safety reasons around 3,000 litters of kerosene fuel which was stored inside a leaking plastic fuel tank was pumped into an iron fuel tank.</li> <li>▪ Gaia received 21,020 litter of kerosene fuel at Tongo and 48.076 litter of kerosene at Bambasi camps from UNHCR. Of the received amount, so far 19,815 litters was distributed for 2,598 refugee households at Tongo refugee camp and the second round kerosene distribution is ongoing at Bambasi camp.</li> </ul> |

|   | <ul style="list-style-type: none"> <li>▪ Through community workers house to house visit is conducted on each camp to check on households stove use and fuel storage. So far 1200 households are conducted at Tongo and Bambasi camps and kerosene stoves which requires a minor maintenance are identified. No major problems are observed on ethanol stoves at Sherkole refugee camp.</li> <li>▪ In order to register the ethanol stoves at Sherkole for Carbon finance; Program of Activities and Project Design Document have developed. The validation of the program by external valuator is the next planned activity. The stoves will be registered under under Gold Standard. The revenue earned by the carbon finance program will use to scale up ethanol stoves and ethanol fuel provision at the camps.</li> </ul> |   |   |
|---|--|---|---|
| Performance Indicator(s)  | Site/Location  | Performance Target  | Actual progress   |
| <ul style="list-style-type: none"> <li>▪ Advocacy for access of PoC to public utilities conducted</li> <li>▪ # of PoC receiving fuel (kerosene)</li> <li>▪ # of PoC receiving fuel (ethanol)</li> <li>▪ # of training sessions conducted for PoC on kerosene/ethanol fuel and stoves safety</li> <li>▪ # of training sessions conducted for staff members/community workers</li> <li>▪ # of litres of kerosene fuel provided</li> <li>▪ # of litres of ethanol fuel provided</li> <li>▪ # of PoC per month receiving kerosene fuel</li> </ul> | <ul style="list-style-type: none"> <li>• Ethiopia,</li> <li>• Tongo &amp; Bambasi</li> <li>• Sherkole</li> <li>• Tongo ,Bambasi &amp; Sherkole</li> <li>• Tongo ,Bambasi &amp; Sherkole</li> <li>• Tongo &amp; Bambasi</li> <li>• Sherkole</li> <li>• Tongo &amp; Bambasi</li> </ul>   | <ul style="list-style-type: none"> <li>• Advocacy for access of PoC to public utilities conducted.</li> <li>• 7002</li> <li>• 130</li> <li>• 58</li> <li>• 6</li> <li>• 70,000 litter</li> <li>• 31,824</li> <li>• 7,002</li> </ul> | <ul style="list-style-type: none"> <li>▪ 100 %</li> <li>• 6542</li> <li>• 130</li> <li>• 58</li> <li>• 6</li> <li>• 70,000</li> <li>• 4,120</li> <li>• 6,542</li> </ul> |

| Performance Indicator(s)   | Site/Location   | Performance Target  | Actual progress  |
|--|---|---|--|
| <ul style="list-style-type: none"> <li>▪ # of PoC per month receiving ethanol fuel</li> </ul>                        | <ul style="list-style-type: none"> <li>• Sherkole</li> </ul>                      | <ul style="list-style-type: none"> <li>• 130</li> </ul>     | <ul style="list-style-type: none"> <li>• 130</li> </ul>    |
| <ul style="list-style-type: none"> <li>▪ Average # of days per month distributed fuel lasts at households</li> </ul> | <ul style="list-style-type: none"> <li>• Tongo ,Bambasi &amp; Sherkole</li> </ul> | <ul style="list-style-type: none"> <li>• 27 days</li> </ul> | <ul style="list-style-type: none"> <li>• 27days</li> </ul> |
| <ul style="list-style-type: none"> <li>▪ # of PoC receiving ethanol stoves</li> </ul>                                | <ul style="list-style-type: none"> <li>• Sherkole</li> </ul>                      | <ul style="list-style-type: none"> <li>• 100</li> </ul>     | <ul style="list-style-type: none"> <li>• 100</li> </ul>    |
| <ul style="list-style-type: none"> <li>▪ # of PoC receiving 10 litre capacity Jerry cans</li> </ul>                  | <ul style="list-style-type: none"> <li>• Sherkole</li> </ul>                      | <ul style="list-style-type: none"> <li>• 100</li> </ul>     | <ul style="list-style-type: none"> <li>• 100</li> </ul>    |
| <ul style="list-style-type: none"> <li>▪ # of PoC receiving pitchers</li> </ul>                                      | <ul style="list-style-type: none"> <li>• Sherkole</li> </ul>                      | <ul style="list-style-type: none"> <li>• 100</li> </ul>     | <ul style="list-style-type: none"> <li>• 100</li> </ul>    |
| <ul style="list-style-type: none"> <li>▪ # of clean cook stoves registered for carbon finance</li> </ul>             | <ul style="list-style-type: none"> <li>• Sherkole</li> </ul>                      | <ul style="list-style-type: none"> <li>• 130</li> </ul>     | <ul style="list-style-type: none"> <li>• 130</li> </ul>    |