

Terms of Reference (ToRs) for the construction of biogas digesters for selected farmers in the West Nile sub-region

1. Introduction

Climate change presents one of the most challenging threats to sustainable development for all categories of individuals and communities. In Uganda, women, girls and refugees constitute one of the most susceptible categories of populations whose sensitivity and fragility to climate shocks is of great concern to policy making and programme implementation. Over the years, such individuals and communities suffer the effects of the phenomenon as they rely on firewood and charcoal for fuel which are not only destructive to the natural environment but also either requires long distance to access or is far beyond their financial means. The quest for and use of biomass fuel in most parts of the country has not only exacerbated the climate change situation but also failed to address efforts to promote the resilience of vulnerable groups to the phenomenon.

The adoption of renewable energy has since been recommended as one of the ways of enhancing resilience to climate change and staving off the worst effects of rising temperatures and other features of global warming. Such energy sources—notably solar, wind and biogas technology—not only reduce the amount of carbon dioxide and other greenhouse gases that are emitted to the atmosphere during their production and use but also relieve vulnerable communities of the burden to buy Liquefying Petroleum Gas (LPG) and harmful chemical fertilizers and pesticides which would worsen the climate change phenomenon. In particular, biogas provides manure for agriculture, energy for cooking and lighting which prevents loss of trees by taking the place of fuel wood and can provide an integrated solution for sustainable agriculture, improved health and lowering environment degradation. Overall, biogas—which is a locally produced energy source--has the potential to be part of the transition towards a more sustainable energy system in modern waste management systems by recirculating nutrients back to farmland.

2. Problem statement

While women and girls play an important role in agriculture and natural resource management in Uganda, they are more vulnerable to and are most affected by climate change (Care Denmark

Strategy, 2019-2025). Over the years, studies have shown that women trek long distances to fetch firewood and lose a lot of valuable time searching various sources of energy. They are also often the least equipped to adopt the renewable energy sources such as solar, wind and biogas due to lack of the basic factors of production such as capital and land. The situation is further compounded by the regular incidences of natural disaster occurrences such as droughts, floods and landslides which have hit some parts of Uganda on an annual basis. Consequently, the limited or even lack of access to these renewable energy sources has not only undermined the individual and family livelihoods of such communities but also those of the entire society. A case in point is the West Nile sub-region where the perennial influx of refugees from South Sudan and Democratic Republic of Congo (DRC) has led to an almost total wipe out of the indigenous tree species within the host communities as the refugees seek firewood for cooking, lighting and curing tobacco. All in all, it is evident that climate change interventions – without targeted efforts to provide alternative energy sources to vulnerable communities will not only perpetuate natural resource depletion but also exacerbate the gender vulnerabilities within society.

Advocates Coalition for Development and Environment (ACODE) is--in partnership with Care International in Uganda--implementing a project that promotes inclusive governance of natural resources and building resilience for humans and ecosystems in West Nile. Working with the Natural Resources and Climate Resilience Forum (NRCRF) under the West Nile Development Association (WENDA), ACODE and Care International in Uganda are seeking to enhance environmental governance and strengthen the resilience of farmers in the sub-region to the impacts of climate change and natural resource degradation. Following a successful inter-district learning and exchange visit by the Forum members to the St. Jude Vocational and Training Centre in Masaka district in November 2020, it was—among other lessons learned—observed that the construction of small scale biogas digesters in selected households in the West Nile sub-region would not only enable the beneficiaries to become more resilient to climate change but also become ‘learning centres’ for the rest of the community.

3. Activity objectives

The overall objective of this activity is to build **seven (7)** small scale (six cubic metre—6m³) biogas digesters in selected areas in the 3 districts of the West Nile sub-region namely: Arua (3), Koboko (2) and Yumbe (2)..

The specific objectives are:

- To enhance the resilience of the women and other vulnerable groups in the selected areas to climate change;
- To use the bio gas digester plants as learning sites for other individuals and communities farmers in the sub-region.

4. Methodology

ACODE seeks to identify a private individual with the required expertise and experience in constructing biogas digesters using high quality materials. The identification of the project beneficiaries will be done by ACODE in collaboration with NRCRF leadership and Community Development Officers (CDOs) in the sub-region.

5. Criteria for selecting beneficiaries

The key considerations for selecting the beneficiaries from this project will include:

- Gender considerations (female headed households will be given priority given that the project focuses on building the resilience of women and girls to climate change);
- Geographical location of the beneficiaries;
- Ownership of cattle to generate the required waste for biogas production;

- Access to regular and adequate water supply to maintain the biogas digester plant;
- Ownership, access to and control of the piece of land where the plant will be constructed.

6. Duration of implementing the activity

The selected contractor for this activity will be expected to hand over the completed seven (7) biogas digester plants to ACODE within a maximum of three weeks (21 days) upon signing the agreement.

7. Reporting

The contractor for this activity will report to the ERIWY Project Manager, ACODE or his designated representative as and when necessary.

8. Experience and knowledge of the contractor

The required contractor for this activity should provide evidence of expertise and experience in constructing biogas plants over the last 5 years or more.

Interested individuals should send a letter of interest, a quotation of the specified biogas digester plants, proposed budget and proof of their expertise and experience to amugeere@acode-u.org/mugeere2010@gmail.com or omugyenyi@acode-u.org/o.mugyenyi2@gmail.com by Tuesday, June 15th, 2021..