

Holy Ghost Multipurpose Training Centre for Street Children



Dogodogo Biogas Project:
an alternative clean energy source friendly to the environment
for cooking at Dogodogo Center

Project presented by:
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DMTC – Project Director

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PROJECT EXECUTIVE SUMMARY

- **Title of the Project:**
Dogodogo Biogas Project: an alternative clean energy source friendly to the environment for cooking at Dogodogo Center
- **Owner of the Project:**
The Congregation of the Holy Ghost-Tanzania Province
- **Project Location**
Dogodogo Multipurpose Training Centre for the Vulnerable Children is located at Bunju, 32 Km North West of Dar es Salaam.
- **Direct beneficiary of the Project:**
Vulnerable youths including orphans and children from the streets at Dogodogo.
- **Project Objectives:**
The project has three major objectives.
 - To provides a sustainable opportunity for individuals and institutions like Dogodogo with livestock to reduce dependency on firewood and fossil fuels and to benefit from modern and clean energy friendly to our environment
 - To provide opportunity and knowledge to the youths currently admitted at Dogodogo and those to be admitted in the future to lean about renewable energies like biogas as well as raising their awareness on how to protect our environment by not cutting trees.
 - To create a pilot project which may be used to educate people around our neighbourhood notably Dar Es Salaam and its surrounding regions that clean and renewable energy is possible and that our planet can be protected and saved by such kind of project friendly to our environment.
- **Project activities :**
Construction and installation of 50m³ Biogas plant at Dogodogo.
- **Type of support required :**
The total cost for realizing the project is Tshs. 35,005,350/= equivalent to 13,782 €. Our local contribution to this project will be 782 €. We therefore request your good Organization to assist us with 13,000 € for the starting up this project so important for the education and environment protection.

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DOGODOGO BIOGAS PROJECT: AN ALTERNATIVE CLEAN ENERGY SOURCE FRIENDLY TO THE ENVIRONMENT FOR COOKING AT DOGODOGO CENTER

Introduction

Founded in the year 1703 to help the most vulnerable children notably homeless boys and chimney swipes to regain their lost basic human rights by providing them with food, shelter, protection against abuses, health services and education, the Congregation of the Holy Ghost Fathers has since then try to concretely practice this ministry by reaching out to vulnerable individuals notably refugees, abandoned children, youths from the streets and from the similar vulnerable environment to realise their God's given potentials. The Holy Ghost Fathers believe that human beings are created in God's image as equals with the same basic rights and obligations. Hence, we try to manifest God's love in the world by "challenging indifference, improving the living conditions of the most vulnerable and promoting their basic human rights regardless of gender, political beliefs, religion or ethnic origin."

To continue practicing this noble ministry to the poor, the Congregation of the Holy Ghost Fathers has accepted as from July 2017 to take over the ownership and the management of the Dogodogo Multipurpose Training Centre (DMTC) at Bunju, Dar Es Salaam formally owned by Dogodogo Centre Street Children Trust. At this centre, children, both boys and girls from the streets and from similar vulnerable background find a home, are protected, loved, respected as well as trained for life skills like carpentry, tailoring, welding, electricity, firefighting and rescue, multimedia, farming, etc, so that they can eventually be employed or be able to employ themselves so as to earn their living and in so doing be integrated into the mainstream society.

But for the children to pursue their dream of studying and of fully realizing their God's given potentialities, they need basic needs like food, water, shelter, playing grounds, classes, good hygienic facilities and above all good environment free from air pollution.

Biogas Project: Problem statement:

It is estimated that in Tanzania, the use of biomass consisting of firewood, charcoal, twigs, straw, crops residues and cow dung is used to meet the daily energy demands for cooking and for other domestic needs. While wood fuel provide about 90% of Tanzania's cooking energy supply, charcoal is mainly consumed in urban areas while firewood is used in rural areas. In urban areas in Tanzania, about 70% of households depend on charcoal.

The use of such source of energy for cooking has a serious ill effects such as degradation of the environment due to deforestation, extinction of living organisms like wild animals, birds, insects etc. due to distraction of their natural habitat and the climatic change problem.

It is estimated that in Tanzania, in the past 50 years, the land covered by forests dropped from approximately 75% to less than 35%. Some experts attribute this mostly to cutting of trees for fuel, to forest clearing for cultivation and for timber. These activities are highly exasperated by population growth which is estimated to an average annual growth rate of

3%. The current rate of deforestation is estimated to cover over 150,000 hectares of land per year. Unless the rate of deforestation is arrested, Tanzania could lose all its natural forests in 25 years. Biomass combustion in households using traditional three stone fire place that lacks any provision for smoke exhaust exposes particular women and children to smoke containing harmful products. Prolonged exposure to smoke is responsible for coughing, wheezing, acute respiratory infection, chronic obstructive lung disease, lung cancer, etc.

Deforestation has made firewood scarce and expensive as a result of which people especially women and children are forced to spend more time in fetching fire wood. On average, institutions like Dogodogo Center uses about 6,320,000Tshs annually to buy firewood and charcoal for cooking.

In the light of the reasons stated above, it is felt imperative that, an alternative energy source, friendly to the environment but renewable and sustainable, be adopted at Dogodogo.

Project Objective

While this “Biogas Project” proposal comes with the general objective of the project which is to conserve the environment by the use of biogas as an alternative source of energy at Dogodogo Center, the project has a specific objective which is to use biogas to reduce firewood cuttings and charcoal which always result in decrease of forest cover.

Rationale of the Project

The rationale for implementing the proposed project is based on the fact that majority of Tanzanian domestic energy needed is met by charcoal and firewood. Cooking services are done mainly on traditional three-stone fires leading to severe health consequences mainly due to indoor air pollution. Uncontrolled tree cuttings result in decrease of forest cover. As a result, distances for collecting firewood are constantly increasing, which leads to fuel scarcity and further economic, social and environmental problems.

The Choice of Generation of Biogas plant

Generation of Biogas by anaerobic digestion of animal manure particularly cow dung is considered to be one such alternative to help reduce firewood cuttings and charcoal. Indeed, biogas provides a sustainable opportunity for individuals and institutions like Dogodogo with livestock to reduce dependency on firewood and fossil fuels and to benefit from modern and clean energy as well as a potent organic fertiliser.

Through this project, Dogodogo would therefore like to capitalize on the Dairy Cow Project and piggery project already existing at Dogodogo to start a Biogas project which will act not only as part of solution to the above stated adverse environmental and economic challenges but also to be a pilot project which may be used to educate people from our neighbourhood, people around Dar es Salaam and its surrounding regions that clean and renewable energy is possible and that our planet can be protected and saved by such kind of project friendly to our environment.

Taking into consideration the above environmental and educational benefits of this project not only to the youths studying at Dogodogo but also for the people around Dogodogo, we are compelled to come again to your good Organization to seek for support so that the above mentioned project can be of a reality.

Project Cost

The project detail costs per items are as shown in the attached document budget. As it is explained in the Proforma invoice attached in this project write-up, the total cost for realizing this project is estimated to cost 35,005,350 Tshs which is equivalent to **13,782 €**. Our local contribution to this project will be 782 €. We therefore request your good organization to assist us with **13,000 €** for the construction and installation of Biogas Project which will be a very good alternative clean energy source friendly to the environment for cooking at Dogodogo Center.

Our Bank account information is as follows:

Account Name : Holy Ghost Fathers Bunju

Account N° : 1952288453400

Swift Code : CORUTZTZ

Bank Name : CRDB BANK PLC

Branch Name : Bagamoyo, P. O . Box 160, Bagamoyo

With thanks for your generous consideration,
Sincerely yours,



Fr. Dyfrig Maliti, CSSp
Project Director