

Concept Note for NGO Small Project Grant “Small Grant Competition”

Implementing Organization: Integrated Health for All Foundation (IHAF), Cameroon (email:)

Project title: Recycling of community waste from cassava (peelings) and pig (waste) in Mankanikong into biogas for cooking.

Project Contact:

Problematic

Mankanikong community in Bafut, North West region, Cameroon is characterized by subsistence agriculture (with excess food/cash crops especially, cassava) and animal husbandry, typically, rearing of pigs. Waste from cassava is generally dumped in the farm and/or around the houses to serve as manure, while pig waste is unfortunately leathered by pigs everywhere, exposing the population to associated health dangers (diarrhea, etc). Recently, following provision of electricity to the Mankanikong community, indigents from all over have rush back home and constructed and currently dwelling in Mankanikong. As a result, most formerly farming lands and bushes from where they normally fetch firewood for cooking have been consumed by newly constructed houses. Currently, indigents experience scarcity of firewood. Thus, indigents now trek via sleepy footpaths for long distances (approx. 5hrs) into a forest crossing locally made hanging bridges (2 sticks across streams) on big streams, worse during wet seasons – a situation for which indigents hold sad memories for in terms of lives claimed. Mankanikong people more than ever before now seek sustainable alternatives to avoid, if not, cut down on their dealings with the unavoidable precarious farm roads. Initially, a few indigents who could afford, used charcoal or and commercial cooking gas from the city of Bamenda (18 km from Bafut) as alternatives to firewood. Based on our feasibility study report, we found recycling of the readily available cassava and pig wastes to be an effective environmentally friendly and sustainable source of biogas for cooking as an alternative to firewood. Thus, valorizing these waste into clean, reliable and sustainable energy option (SDG7) for the people of Mankanikong while reducing human exposure to environmental waste for good health will be a credit to the socio-economy of the indigents.

Objectives

To provide sustainable cost-effective and efficient cassava-pig wastes-based cooking fuel to at least 85% of indigents in the Mankanikong community by the end of the year 2018.

Methodology

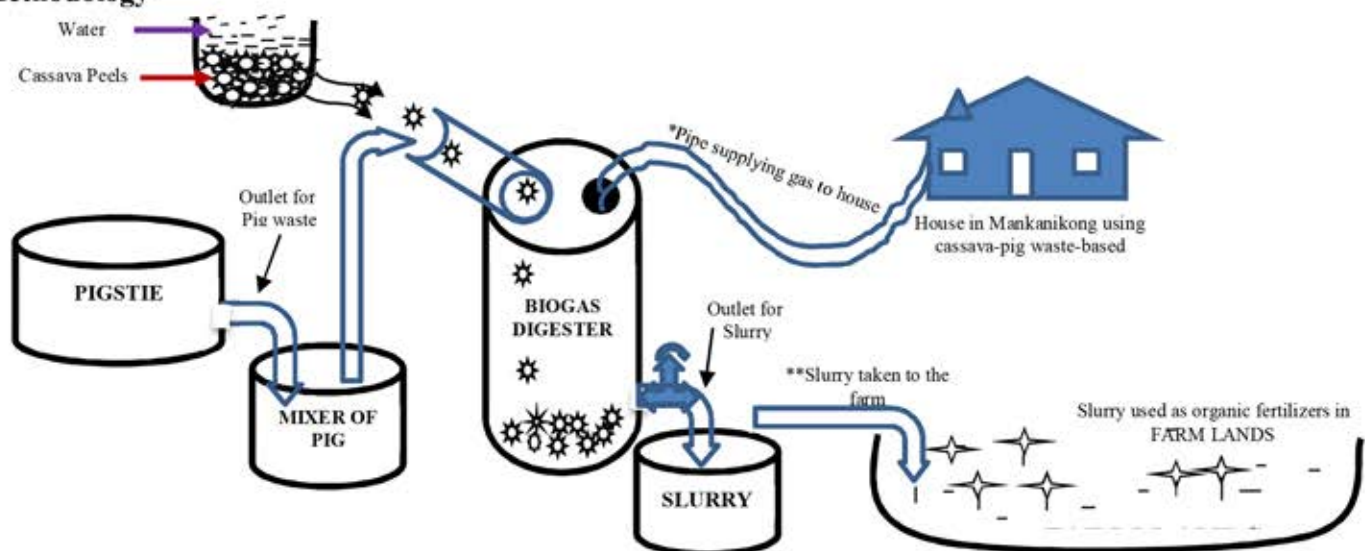


Figure 1. Production of biogas (showing how it works): *Biogas or cooking gas to the house. **Slurry (liquid manure) to the farm

NB: Our Model for Biogas for Mankanikong. Need 7 days for the plan to begin produce biogas (fuel) for cooking.

Expected Outcome

At the end of this project, at least 60% of Mankanikong indigents would appreciate and know how to valorize cassava and pig wastes for fuel, and so construct and sustain their own cooking gas as affordable alternative to firewood. Additionally, some indigents will become self-reliant as craftsmen for transforming cassava-pig wastes for fuel, or as a corporative initiatives (e.g., a biogas plan management and consultancy (Biogas-PMC)) such as large scale cassava as well as pig farming, collection and recycling of waste, and local biogas plan building/repairs. Furthermore, collecting and recycling all pig waste will improve sanito-hygienic condition while booster the socio-economic conditions of Mankanikong