



Waste for Development W4D Project

Track: Entrepreneurship

Sub-Track: Economic and Social Entrepreneurship

Presented by

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- **Background:** 3 out of 4 rural dwellers in Cameroon use wood as the prime source of heating, while 89% use chemical fertilizers to improve on yields, which are environmental unfriendly acts.
- **Purpose:** Entails transforming animal and household wastes to biogas. With this project, we waste nothing. We rear animals, use their waste to produce biogas, use the slurry to fertilize our farms as well as sell the animals when they attain maturity and make some money. Socially, we offer the bio-gas FREE of charge in 12 orphanages.
- **Capacity Building:** We train the local population on artisanal methods to produce bio-gas from wastes, without any industrial knowledge.
 - We also have a **laboratory**, where we rear **5000 broilers (chickens)** and **300 pigs**, whose droppings are transformed through anaerobic digestion to produce bio-gas.
 - We produce bio-manure from the slurry left over, after bio-gases (CH_4 , CO_2 , H_2S , CO) are extracted (**Bio-manure in dried form**)
 - **Experimental farm:** We also have a 5 hectare bio-farmland, in Ndop whose yields are sold.

W4D

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CHARITY

With this project, we give a positive returns to the society by offering bio-gas for FREE in 12 orphanages in the North West and West Regions of Cameroon (social entrepreneurship)

OUTREACH

Provide best practices to marginalized communities on sustainable development initiatives. We have as beneficiaries poor indigenous farmers in 21 localities, summing up to about 300 000 inhabitants in total.

PROFIT

This project permits us to sell the chickens, eggs, pigs and farm yields every 3 months.

AGRICULTURE

79% of Cameroonians live on agriculture. With this project, poor farmers save 23% of their revenue as bio-manure substitutes chemical fertilizers, which is expensive and bio-unfriendly. Bio-manure also increases yields by 11%.

SUSTAINABLE DEVELOPMENT

Deforestation is deterred as the indigenous people produce bio-gas from household and animal wastes, to replace wood generally considered the only source of heating.

Innovation

Packaging of Bio-manure

For the first time ever we dry up slurry (bio-manure) and package them in degradable bags which can be easily transported, stored for long and used at any time.

We Decomplexify bio-gas production

By using very local materials such as tins, hand-made digesters, local pipes and used car tubes. With this project, waste will no longer be littered, but are transformed to produce renewable energy

Economic viability

- We rear **5000 birds and 300 pigs**, which we sell every 3 months, with a profit margin of 1.21\$ per broiler summing up to **6050 \$**, and 1.89\$ per pig summing up to **567 \$**. Everyday, we collect about 180 eggs and make a profit of **127.67\$ monthly**.
- ***If we multiply the number of animals reared, the profit margin will triple.***
- We also have 5 hectares of experimental bio-farmland, which we sell its proceeds. In the **June-September** farming season, we make a profit of **1800\$** and in the **December-February** season, we make a profit of **1500\$**.
- Besides economic profit, we make **social profit**, by offering free bio-gas to orphans. Basically, we could sell the bio-gas, but we decided to offer it for free to the underprivileged, in order to encourage the usage of renewable energy in our localities.

This project can be scaled and replicated everywhere in Africa. It does not require industrial or chemical knowledge. It is cheap (almost free) as those who cannot afford animals use household wastes. This project can be leveraged as well as is lucrative to investors in renewable energy, agriculture, social enterprise and development.

What we want.....

- Investors who can work with us to increase the number of animals reared, this will directly increase the quantity of bio-gas produced.
- Get more bio-bags to store our bio-manure.
- We are also looking for investors in agriculture, to increase the quantity of cash crops produced in the bio-farms (we target 20 hectares in 2 years).
- Increase the number of orphanages

Thank you

