



Funded by the European Union

Technical Assistance: Organic waste management project, targeting women and young people in particular, using inflatable biodigesters.

Location: Fessard, Municipality of Kenscoff, Haiti

Solution: Inflatable Biodigesters

UNEP CTCN grant: USD 180,000-200,000

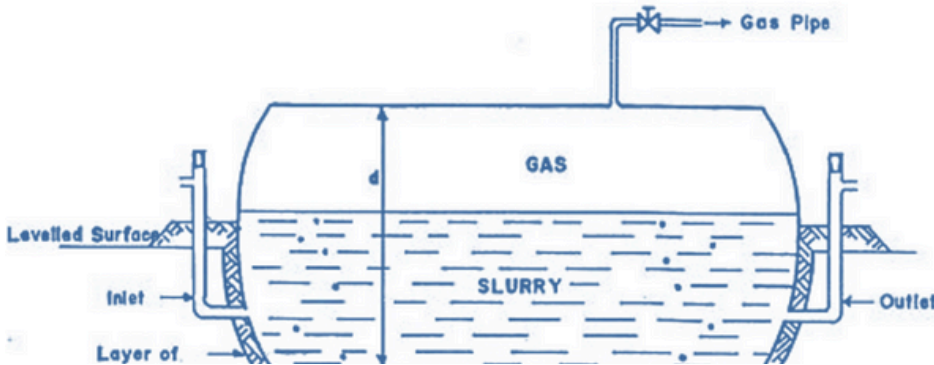


Diagram of inflatable biodigester



Haiti has long faced the challenge of environmental degradation, including deforestation and poor waste management, leading to soil erosion, sediment buildup in rivers, and frequent flooding in low-lying areas. In response, this pilot will test inflatable biodigesters that improve organic waste management, as a sustainable energy solution for cooking and lighting. It is being developed with the specific inclusion of women, youth, and vulnerable populations in the community.



Objectives

The project seeks to address the energy access challenges faced by families in the rural areas of Kenscoff Municipality, by introducing inflatable biodigesters powered by organic waste.

By improving access to affordable and reliable clean energy, the project aims to reduce the dependence on traditional energy sources like diesel generators and firewood.

- **Promote clean energy use:** Enable rural families to access biogas using biodigesters.
- **Capacity building:** Assess community's current agriculture practices and provide training on how to use inflatable biodigesters.
- **Support climate resilience:** Reduce reliance on diesel and firewood, improving climate adaptation.
- **Business development:** Explore the possibility of the production and commercialization of inflatable biodigesters in Haiti.
- **Climate-smart agriculture:** Introduce climate-smart agriculture to enhance agricultural productivity.



Climate Impact

- **Renewable Energy & Climate Change Mitigation:** Reducing methane emissions from organic waste while providing clean cooking fuel.
- **Improved energy efficiency:** The project supports the adoption of clean energy technologies, removing the dependency on other energy sources, including firewood or fossil fuels, and reducing the pressures of deforestation in the longer term



Security Benefits

- **Enhanced energy security:** The introduction of clean energy reduces dependence on firewood collection or costly diesel, stabilizing energy availability in rural areas.
- **Community stabilization:** Access to reliable energy supports community business initiatives, reducing the trend to move away and enhancing community stability.



Social Impact

- **Gender & Social Inclusion:** This project will ensure women's participation, promoting gender equality, and benefit other vulnerable groups.
- The project will directly benefit women and youth in the Kenscoff Municipality, providing approximately 1,500 direct users with reliable and affordable access to clean energy.
- Women will be key beneficiaries, as they are typically those cooking, reducing the time and labor spent on traditional time-consuming tasks like collecting firewood. Of the direct beneficiaries, 50% are women and 25% are youth.



Food Security

- **Food Security:** Producing organic fertilizer from biogas digesters enhances agricultural productivity, supporting economic resilience.



CS Climate Technology

- The project promotes biogas digester technology using organic waste, reducing energy costs and dependence on non-renewable resources.
- These biogas systems are designed to be adaptable to the specific needs of rural communities, ensuring the increased use of sustainability practices.
- This project will also explore the potential for developing a market in Haiti for inflatable biogas digesters, ensuring long-term access and environmental benefits.



Replication Potential

- This biogas digesters clean energy model can be replicated in other regions of Haiti and other countries with similar energy access challenges. The use of readily available organic waste ensures affordability and scalability for rural communities.

