

ANAEROBIC SANITATION

PROJECT OBJECTIVES

AN APPROPRIATE HANDLING, TREATMENT AND DISPOSAL OF SEWAGE AND ORGANIC WASTE ACCEPTABLE IN THE AFRICAN SOCIO-CULTURAL AND RELIGIOUS ENVIRONMENT

THE BENEFITS TO BE DERIVED FROM A BIO-LATRINE RELATE TO:

- A. *SANITATION***
- B. *BAD ODOUR ELIMINATION***
- C. *TREATMENT ON-SITE***
- D. *LAND SAVING METHODS***
- E. *USEFUL BY-PRODUCTS***
- F. *COST EFFECTIVENESS***

A. SANITATION

1. Biogas digesters, treats the fecal matter intake anaerobically (under airless condition)
2. In the digestion process the following Epidemical diseases Pathogens, are eliminated
 - a) VIRUSES: Poliomyelitis, infectious hepatitis
 - b) BACTERIA: Cholera, salmonella, Shigella and Bacillary – Dysentery
 - c) PROTOZOA: Amoebic Dysentery, Giardiasis, Tape Worm, Hook Worm, Round Worm and other worms are eliminated

B. BAD ODOUR ELIMINATION

1. The nuisance of Bad-Odour associated with, Pit-Latrines, Bucket or Pan-Latrines, K.V.I.P. Latrines and Flush Toilet Connected to Septic Tanks, in Residential Areas, Communities, Market Places, Lorry Parks, School and Recreational Centres, is NOT associated with a Anaerobic Sanitation System and Bio-Latrines. The concept is also applicable to Church Premises.

C. ON-SITE TREATMENT

1. The Biogas Digester is designed to treat the effluent fecal matter on site. The fecal waste will not be transported to a distant treatment pond, which requires the use of vehicles like cesspool emptiers.

D. LAND SAVING METHODS

1. Land wastage, associated with the shifting-construction techniques and methods of Pit-Latrines, K.V.I.P. and the likes become a thing of the past.
2. The Life span of a Bio-Latrines can be greatly enhanced with proper care of the facility.

E. BY-PRODUCTS AND THEIR USAGE

EFFLUENT

1. The effluent from digested Biomass of a Biogas Digester is odourless and pathogens free.
2. It has a high value of Nitrogen content, thus environmentally friendly and can be used as fertilizer to enrich soil organic matter.
3. The effluent is also flies expellant, and does not harbour flies, other infestations and vermins.

METHANE GAS (CH₄)

1. The Methane (CH₄) emission that occurs as a result of the digestion process is odourless and is standard for Domestic use.
2. The gas can also be used to light gas Lanterns at night within and around the toilets in Rural Communities without electricity.
3. It can be used to run gas-convertible Engines to provide electricity in Rural areas.
4. The Gas can also be used for gas refrigerators and for laboratories.

F. COST EFFECTIVE

1. A perfectly built Bio-Latrine is Robust.
2. The digester has a life span of a minimum of 50 years.
3. Septic Tanks and soak-aways also become a thing of the past.

BIO-LATRINE CAN BE BUILT FOR:-

- a) Rural Communities
- b) Urban Areas and Cities
- c) Colleges and School
- d) Hospitals, Army and Police Barracks
- e) Individual homes and Households
- f) Recreational Centres, Lorry parks, Market Places etc.
- g) Hotels, Restaurants etc.

DESIGN ADAPTABILITY

1. The planning, designing and costing are preferably to be undertaken with the client, to suit the client expectations.
2. Bio-Latrines can be constructed from a single seater to over Eighty (80) seaters.

RELIABILITY, EFFICIENCY AND ON-TIME DELIVERY IS ALWAYS ASSURED

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DOOR TO DOOR SERVICE

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