

Flexi Biogas Solution

Operations Guide

CORRECT OPERATION PRESSURE / HEIGHT

For best operations and continual pressure, feed the system sufficiently to maintain the height of digester between the knee and the waist.

FEED GUIDE

1. 4 – 6 member households cooking gas requirement averages 1,000 lts
2. 30 Kgs of cow dung will produce about 1,000lts of Biogas.
3. Small generators and engines consume approximately 1,000lts per hour
4. Vegetation, market & Kitchen waste produces 1½ to 2 time as much gas as dung.
5. Always use **FRESH** dung, vegetation and market & Kitchen waste
6. Avoid dry, fibrous or woody matter – straw, hay, sawdust etc

MIXTURE GUIDE

1. Always use equal amounts of water with feed matter – a little too much water is better than a little too little
2. Mix into soup or light uji-like texture
3. Finely chop or crush vegetable matter
4. Ease slurry flow by mixing crushed vegetable matter with dung
5. Pour into inlet of system

OVERFLOW

- The system will overflow automatically
- If desired, use extraction tool to remove fertiliser

DO NOT

- **use any chemicals on biogas systems**
- use water with detergents
- release excess gas, rather burn it off at stove - e.g. boil drinking water

**FOR ANY QUESTIONS OR CLARIFICATIONS PLEASE CALL
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TROUBLE SHOOTING

Symptom	Possible cause	Solution
No gas flow	Gas outlet pipe blocked at digester	Clear by blowing back from water trap down-pipe a) Turn OFF valve in kitchen and turn ON Main valve at digester. b) Lift downpipe out of water trap, wipe and blow down pipe to clear blockage
No gas flow	Water lock – Clear Pipe	Tilt clear pipe to drain water into Water Trap
No gas flow	Water lock – Gas line	Clear water locks 1. a) Turn ON valve in kitchen and turn OFF Main valve at digester. b) Remove gas pipe from stove c) Lift downpipe out of water trap, wipe and blow down pipe to clear blockage Clear water locks 2. a) Turn ON valve in kitchen and turn OFF Main valve at digester. b) Remove gas pipe from stove c) Lift downpipe out of water trap d) Blow down stove end to clear blockage
Slow Gas Build-up	Low water level in Trap	Fill Water Trap
No gas build-up	Low water level in Trap	Fill Water Trap
No gas build-up	Jiko left turned ON	Turn OFF Jiko
No gas build-up	Leak in system	Identify and repair
Gas runs out very quickly	Low or Empty water trap	Fill Water Trap

IMPORTANT

**WATER TRAP BOTTLES MUST ALWAYS BE FULL
&
OVER-FLOWING OF BIO-SLURRY IS GOOD**