

BASIC GAS PRODUCTION PARAMETERS

Manure type	Water content (%)	Kgs fresh required to	Dry material gas	Kg material needed		Kg manure produced	kg dry per day	Number to produce 1m ³ gas	Number of animals
				Dry material	Fresh material				
Pig Manure	82%	5.56	0.25	4.00	22.22	3.0	0.54	7.41	
Cow Manure	83%	5.88	0.19	5.26	30.96	15.0	2.55	2.06	
Chicken Manure	70%	3.33	0.25	4.00	13.33	0.1	0.03	133.33	
Human Manure	80%	5.00	0.3	3.33	16.67	0.7	0.14	23.81	
Wheat Straw	15%	1.18	0.27	3.70	4.36	1.00	0.85	4.36	
Corn Stalks	18%	1.22	0.29	3.45	4.21	1.00	0.82	4.21	
Water Hyacinth	93%	14.29	0.31	3.22	46.00	1.00	0.07	46.08	Kg of material

CALCULATION TABLE:

Material	Factor	Number	m ³ biogas
Pig Manure	0.135	1	0.14
Cow Manure	0.4845	1	0.48
Chicken Manure	0.0075	1	0.01
Human Manure	0.06	1	0.06
Food waste	0.75	1	0.75
Wheat Straw	0.2025	1	0.20
Corn Stalks	0.2378	1	0.24
Water Hyacinth	0.0217	1	0.02

APPLIANCE PRICE LIST

All prices excl VAT

Appliance:	Price
Gas dome	***
Single gas burner	R 780.00
Double gas burner	R 702.00
Gas lamps	R 195.00
Gas steamer (rice cooker)	R 795.00
Gas water heater	R 2,496.00
Desulphurisation unit	R 133.00
Pressure gauge	R 117.00
Flow meter	R 920.00
Generator 700W	R 5,832.00
Generator 1500W	R 11,887.00

APPLIANCE CONSUMPTION RATES:

APPLIANCE	m ³ /h	Number	Hours	Total m ³ /h
Single gas burner	2.50			0.00
Double gas burner	0.90	1	2.0	1.80
Gas lamps	0.07	5	5.0	1.75
Gas steamer	0.15	1	1.0	0.15
Gas water heater	2.20	1	0.5	1.10
Generator 700W	0.70	1	0.0	0.00
Generator 1500W	1.20	1		0.00
				4.80

*** Standard pricing: R30,000 - Depending on rock formation. Client responsible for digging of hole.