

# FATIMA MATA NATIONAL COLLEGE

AUTONOMOUS

(Reaccredited with 'A' Grade by NAAC)

Affiliated to University of Kerala



## 7.1.3 Biogas Plant Report

**IQAC** INTERNAL QUALITY ASSURANCE CELL

# PROJECT REPORT FOR SETTING UP OF A BIOMETHANATION PLANT (BIOGAS PLANT) – FOOD WASTES

## Title of the project

Scientific, hygienic disposal of organic wastes, both of plant and animal origin, generation of Biogas and nutrient-rich organic manure and generation of electrical energy using biogas run IC engine generator.

## Technology Dissemination

Jyothi Biogas & Rural Social Service centre, Chemboor, Trivandrum.

## Process / Technology

Biomethanation of wastes from plant and animal origin occurs when these wastes are kept in oxygen deprived conditions. The waste treatment plant proper where biomethanation takes place, comprise of the waste digester and the biogas storage space in a single masonry – RCC structure. To hasten the acidifying and methanation process suitable preconditioners are employed.

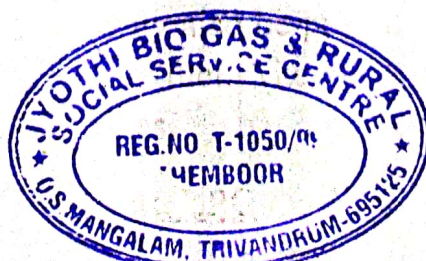
## BIOGAS

Biogas is an effective fuel for cooking and running IC engines. Biogas is a mixture of methane and carbon dioxide. Hydrogen sulphide, Hydrogen and other gases in very small quantities may also be present in Biogas. It is the methane gas which makes Biogas a valuable fuel. The more the methane content, the more useful and effective will be Biogas.

## Comparison between Biogas and LPG

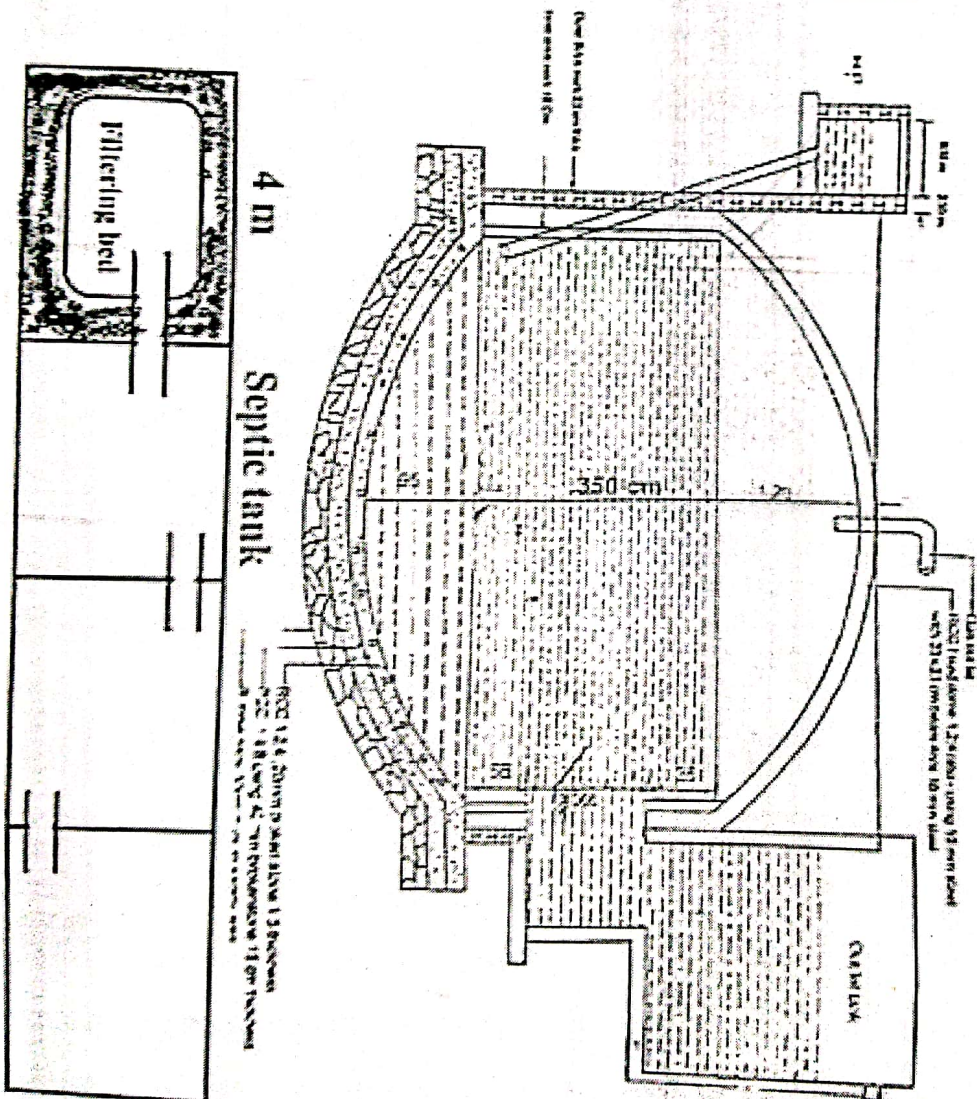
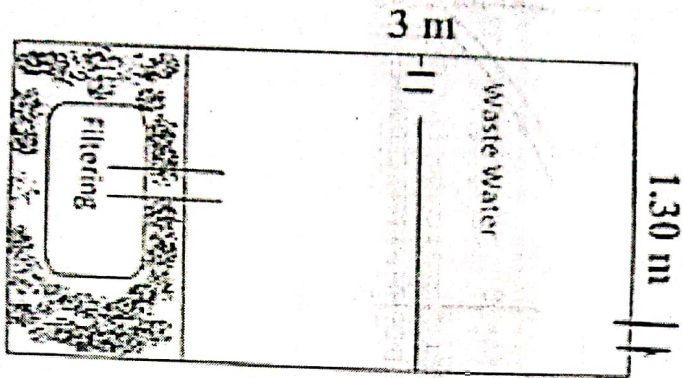
A 500 Kg per day capacity Biogas plant produces approximately 40 m<sup>3</sup> (40,000 ltr) of Biogas per day when feed with 500 kg waste. Out of this 8000 ltr Biogas will be stored in the gas storage space of the plant. If needed additional biogas storage facility may be constructed.

40 m<sup>3</sup> Biogas is equal to 17.33 kg of LPG (Butane)



**MINES APPROVED FIXED DOME BIOGAS PLANT BASED ON NIGHT SOIL - ALL BIODEGRADABLE WASTE 100 Kg**

Gas holding capacity at one time - 10% daily gas production  
HRT - 10 days



**CLETUS JOSEPH & CO.**  
**CHARTERED ACCOUNTANTS**

E/II-07- Bishop Jerome Nagar  
Commercial Complex  
Kollam-691 001



Phone : 0474-2745148 (O)  
0474-2723167 (R)  
98477 29375 (M)

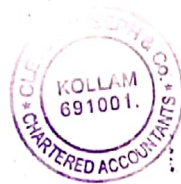
E-mail : cletusjoseph@rediffmail.com  
cletusfca@gmail.com

**AUDIT REPORT**

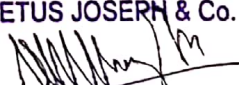
We have verified the attached Income and Expenditure Account for the period from 07.03.2018 to 31.05.2019 and the Balance Sheet as at 31<sup>st</sup> May 2019 of **Fatima Mata National College Parents Teachers Association, Kollam** and report that the above Income and Expenditure Account and Balance Sheet are in agreement with the Books of Accounts produced before us subject to the following:

Assistance to Guest Lecturers as per last B/S of Rs.18, 31,450/- is outstanding, but no recovery has been made during the year. Hence the matter may be looked into and necessary decision may be taken.

Place : Kollam  
Date : 04.06.2019



For CLETUS JOSEPH & Co.

  
CLETUS JOSEPH, B.Com, F.C.A., BISA (ICA)  
M.No. 202381

**FATIMA MATA NATIONAL COLLEGE  
PARENTS TEACHERS ASSOCIATION  
KOLLAM**

**RECEIPTS & PAYMENTS ACCOUNTS FOR THE PERIOD FROM 07.03.2018 TO 31.05.2019**

RECEIPTS	AMOUNT	PAYMENTS	AMOUNT
To Opening Balance :		By Travelling Expenses	2,000.00
<b>Fixed Deposits:</b>		" Printing & Stationery	50,077.00
Rt.Rev.Dr. Joseph G. Fernandez		" Postage & Telephone	820.00
Golden Jubilee Fund	1,00,000.00	" P.T.A. Executive Committee Meetings	6,187.00
Rt.Rev.Dr. Jerome Debate	1,00,000.00	" Bishop Jerome Paper Presentation Competition	97,623.00
Fund		" NSS	40,000.00
Rt.Rev. Dr. Stanly Roman		" Audit fees	4,000.00
Episcopal Ordination		" Club Activities	9,000.00
Memorial Scholarship Fund	1,00,000.00	" Financial assistance to students	5,000.00
<b>FMNC Staff Cooperative Bank</b>		" Renovation of Latrine	43,635.00
<b>Fixed Deposit:</b>		" Merit Day Expenses	50,000.00
FD.No17531	34,504.00	" Staff Salary & Allowance	1,89,000.00
FD.No17532	<u>27,157.00</u>	" Refreshment for new Admission	35,912.00
South Indian Bank		" Guest Lecture & Non Teaching Staff Salary	5,22,000.00
SB A/C No. 12831	3,86,424.00	" Annual General Body Meeting	21,962.00
Cash in hand	<u>9,610.00</u>	" Donation & Charity	35,815.00
		" Arts Day	10,000.00
		" Induction Day	44,115.00
<b>" New Admission :-</b>		" Department Fund	2,33,084.00
Donation & Membership	46,78,400.00	" Yoga class	6,000.00
Less: Refunded to Students		" Hospitality	13,000.00
Left With TC	<u>1,85,200.00</u>	" Miscellaneous Expenses	1,990.00
		" Bank Charges	98.40
		" Science conference	15,630.00
	44,93,200.00		

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" Bank Interest:			" Metreculation Fee	55,000.00	
F D A/C	1,56,543.00		" Biogas Plant for Canteen	2,76,900.00	
S B A/C	<u>21,884.00</u>	1,78,427.00	" Student welfare	30,000.00	
			" IQAC	50,000.00	
" Guest Lecture Loan Refund		20,10,000.00	" Seminar	19,014.00	
			" Skill Enhancement	2,000.00	
			" Table cloth, Cup & Saucer and Glass	9,552.00	
			" Maintenance for Napkin	15,700.00	
			" Butterfly Garden	3,11,513.00	
			" Schlorship & Award	89,750.00	
			" K.U Youth Festival	75,000.00	
			" Napkin Vending Machine	36,500.00	
			" Loan to Guest Lecturers	25,00,000.00	
			" Closing Balnace:		
			Fixed Deposit with FMNC Staff Cooperative Bank		
			Rt.Rev.Dr. Joseph G. Fernandez		
			Golden Jubilee Fund	1,00,000.00	
			Rt.Rev.Dr. Jerome Debate	1,00,000.00	
			Fund		
			Rt.Rev. Dr. Stanly Roman		
			Episcopal Ordination		
			Memorial Scholarship Fund	1,00,000.00	
			Other Fixed Deposit:	21,90,610.00	
			South Indian Bank SB A/C No.12831		
			SB A/C No. 12831	37,209.60	
			Cash in hand	<u>3,625.00</u>	25,31,444.60
<b>Total</b>		<b><u>74,39,322.00</u></b>	<b>Total</b>		<b><u>74,39,322.00</u></b>



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