CHAPTER-V

INSTALLATION OF GOBAR GAS PLANT

5.1 KNOWLEDGE ABOUT DIFFERENT TYPES OF FUEL:

GOBAR GAS PLANT

It is seen that the knowledge about different types of fuel energy is with the respondents for quite a long period. All these are traditional sources of fuel. However, the gobar gas as an energy for kitchen purpose is a new thing to the adopters. When enquired about the source of information about this energy source, we find that the

TABLE No. 17

DISTRIBUTION OF RESPONDENTS ACCORDING TO THE SOURCE OF INFORMATION ABOUT

Sr. No.	Source of information	Respon- dent	Percen- tage
1.	Gram Sevak	44	44.44
2.	Extension Officer of the sugar factory	3 9	39.39
3.	Khadi Gramodhyog	05	05.05
4.	Friends/Relatives	03	03.03
5.	Nobody but the information was gathered by the respondent himself	01	01.01
6.	Information from other sources	05	05.05
7.	Co-operative Society	02	02.02
	Total:	99	

Source: Information collected through personal interview.

village level worker namely a Gram sevak who is the lowest cader officer in the Panchayat Raj system, has performed the task to communicate the information to the villagers about gobar gas plantation. The number of respondents received the information from the Gram Sevak is 44 (44.44%) which is a sizeable number. Another important source of information is the sugar co-operative. The extension officer of the Kuditre Sugar Co-operative imparted the information aboutgobar gas plantation to 39 respondents (39.39%). It shows that the role of a sugar co-operative as a catalytic agent of social change is being performed effectively. The Khadi Gramodhyog working for the rural development has been the source of information to 05 (5.05%) members. The Khadi Gramodhyog extension camp was the source for these five respondents. There are 03 members (3.03%) having been informed by friends and relatives who have already adopted the gobar gas plant. Co-operative society office bearers, advertisement in the news paper has been the source for remaining number of respondents, which is revealed from the table given above.

Thus, it is seen that the Gram Panchayat officer and the sugar co-operative extension officer are the major sources of information.

5.2 TIME GAP BETWEEN AWARENESS AND INSTALLATION OF GOBAR GAS PLANT:

The general tendency of the average rural life is not to accept any new innovation immediately. He is not ready to take any risk and is not sure about the results. He takes his own time to make his mind for accepting new things. The Gram Sevak and Sugar Co-operatives extension officer had provided the details about this new source of energy to the villagers but they took atleast 6 months to make up their minds.

TABLE No. 18

DISTRIBUTION OF RESPONDENTS ACCORDING TO TIME GAP BETWEEN AWARNESS AND READINESS FOR INSTALLATION OF GOBAR GAS PLANT

Source of Information	6 months	Perce- ntage	Source of Information	One year	Perce- ntage
Gram Sevak	<u>-</u> 27	81.82	Gram Sevak	15	22.72
Sugar factory	04	12.12	Sugar factory	35	53.03
Government	ol	03.03	Khadi	05	07.57
Co-operative	perative 01 03.03 Gramodhyog		Gramodhyog		
-			Friend/ Relatives	03	04.55
			No respondent but himself	01	01.52
			Government	04	06.06
			Co-operative	01	01.52
			Zilla Parishad	02	03.03
Total:	33	33.33	Total:	66	66.66

Source: Information collected through personal interviews.

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Table No. 18 given above gives detail about the source of information received and the preparation of mind by the respondent for the installation of the plant.

The number of respondents who took at least six months to prepare their minds for the installation of gobar gas plant is 33 (33.33%) and those who took one year is 66 (66.66%). These figures reveal the tendency of rural dwellers to give more thought for the acceptance of any new or novel thing.

5.3 PURPOSE OF THE GOBAR GAS PLANT:

Gobar gas plant is having many advantages. It is a major source of enquiry in the form of fuel as well as it can provide light with the use of gas mentals. It gives the farm manure in a better manner. It is also used as a source of power generation.

The respondents under study have given the information that they have installed the gobar gas only for the cooking purpose.

TABLE No. 19

DISTRIBUTION OF RESPONDENTS ACCORDING TO THE PURPOSE OF GOBAR GAS PLANT

=====		= _ #_ #_ =	:-=-=
Sr. No.	Purpose	Respon- dent	Perce- ntage
======	-	=- =	
1.	Cooking	99	100.00
2.	Cooking and lighting	-	-
3.	Cooking and power generation	-	•
=			
	Total:	99	100.00
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Source: Information collected through personal interviews.

Table given above shows that all the respondents have adopted the gobar gas for the fuel purpose only.

5.4 TYPE OF GOBAR GAS PLANT :

The type of gobar gas plant adopted by the respondents under study is given in the table No. 29.

TABLE No. 20

DISTRIBUTION OF RESPONDENTS ACCORDING TO THE TYPE OF GOBAR GAS PLANT INSTALLED

Sr.No.	Type of gobar gas plant	Respondent	Percentage
1.	KVIC model	06	06.06
2.	Janta model	20	20.20
3.	Drum model (Din Bandhu)	42	42.42
4.	Taki model	31	31.31
	Total :	99	

Source: Information collected through personal interviews.

Six adopters have a drum type Khadi Village
Industries Commission (KVIC) model. There are 20 (20.20%)
respondents having Janata model without drum, it is a
cemented type of gobar gas plant. The majority of the
respondents have Drum model known as Din Bandhu model
42 respondents (42.42%) and Taki model 31 respondents
(31.31%). These are models developed at later stage by
the gobar gas plants industries.

However, there is no specific reason why a particular model or type has been selected by the respondent. They replied that, the model suggested by the Gram sevak or an extension officer has been adopted by them.

5.5 SIZE OF GOBAR GAS PLANT, AMOUNT SPENT AND SUBSIDY RECEIVED:

The size of the gobar gas plant adopted by the respondents under study is given in table No. 21

TABLE No. 21

DISTRIBUTION OF HOUSEHOLDS ACCORDING
TO THE SIZE OF GOBAR GAS PLANT

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Sr. No.	Size of gobar gas plant	Respon- ndent	Perce- ntage
1.	120 cft. Taki	03	03.03
2.	250 cft. Drum	ol	01.01
3.	105 cft. Drum Dinbandhu	ol	01.01
4.	140 cft. Drum Dinbandhu	35	35.35
5.	210 cft. Janta	09	09.09
6.	410 cft. Dinbandhu	02	02.02
7.	280 cft. Taki	09	09.09
8.	240 cft. Taki-Janata	25 _.	25.25
9.	180 Janata Taki and Dinbandhu	11	11.11
10.	150 cft. Drum Dinbandhu	03	03.03
	Total:	99	
=====			

Source: Information collected through personal interviews.

The number of respondents having 140 cft.capacity is more, 35 (35.35%). Those who have adopted Janata model having the capacity of 240 cft. are 25 (25.25%). The big plants with 410 cft. capacity is 2 (2.02%). 180 cft. plants have been adopted by 11 (11.11%) respondents, while 9 members (9.09%) have the gobar gas plants with 280 cft.

cft. capacity. 250 cft. and 105 cft. models have been adopted by one respondent in each case. 150 cft. has been adopted by 3 (3.03%) respondents. There are 3 respondents (3.03%) who have adopted 120 cft. model.

The majority of the respondents have adopted the medium sized gobar gas plants: The small sized plants are also more in number adopted by our respondents. The bigger the size of the plant more is the investment of the owner. Thus, it is found that only 2 respondents have a big sized model of gobar gas plant.

However, the size of the gobar gas plant has signified that the respondents were not able to invest more in their installation.

This can be revealed from the table No. 22 given below:

TABLE No. 22

DISTRIBUTION OF RESPONDENTS ACCORDING TO THE AMOUNT SPENT FOR THE INSTALLATION OF GOBAR GAS PLANT

Sr.No.	•	spent on	Respondent	Percentage
1.	3000 -	7000	54	54.54
2.			38	38.38
3.	10,001	10,000 empl about	07	07.07
-	Tot	al:	99_	

Source: Information collected through personal interviews.

It is revealed that more than half of the respondents 54 (54.54%) have been able to spend between the range of Rs. 3000 to 7000 including the subsidies they could get from the sugar factory and from the Khadi Gramodyoga Board. The number 38 (38.38%) respondents have invested between Rs. 7000 to 1010000/- for the installation of the gobar gas plant. Only 07 respondents (07.07%) could afford to invest more than Rs. 10,000 for the purpose of gobar gas installation.

The subsidy given by the Khadi Gramodyoga is 1500/- and the share of the sugar co-operative is 1500/-. Thus, the adopter has to invest for the installation of gobar gas plant.

Thus, it can be said that, the financial capacity of the respondent is revealed as for as the investment in gobar gas is concerned.

The subsidy one gets for the installation of gobar gas plant is from only one source from the sources mentioned above.

The installation of the gobar gas plant has been supported financially by the sugar co-operative and the Khadi Gramodhyog and the State Government and Zilla Parishad agencies.

The respondent has to bear about 33% of the total expenditure. Table No. 23 gives the number of respondents who have received the subsidy.

TABLE No. 23

DISTRIBUTION OF THE RESPONDENTS
ACCORDING TO THE SUBSIDY RECEIVED

Sr. No.	Subsidy received	Respon- dent	Percen- tage
1.	Sugar factory	41	41.41.
2.	Khadi Gramodhyog	04	04.04
3.	Zilla Parishad/State Government	40	40.40
4.	Don't received subsidy	14	14.14
=====	Total :	99	=

Source: Information collected through personal interview.

The information gathered through personal interviews reveals that 23 scheduled caste members have been given 100% subsidy, while others have received subsidy from 33% to 75% of the total cost depending upon their income.

5.6 DUNG COLLECTION:

Dung collection is an important aspect of the gobar gas plant. It requires regular feeding of the dung for its proper utilization. The collection of dung is





Housewife engaged in dung mixing

mainly done by the housewives. Table No. 24 gives us the idea that 90 (90.90%) housewives are engaged in the work of dung collection. There are only 5 (5.05%) husbands and 4 (4.04%) servants engaged in dung collection.

Another important factor in this regard is the quantity of dung required for proper utilization of the gobar gas plants. The quantity of the dung required depends upon the size of the gobar gas plant.

Table No. 24, gives an idea about the quantity used for the gobar gas plants.

TABLE No. 24

DISTRIBUTION OF RESPONDENTS ACCORDING
TO THE DUNG COLLECTORS

Sr. No.	Dung collectors	Respondents	Perce- ntage
1.	Housewife	90	90.90
2.	Husband	05	05.05
3.	Servant	04	04.04
******	Total:	99	*****

Source: Information collected through personal interviews.

TABLE No. 25

DISTRIBUTION OF RESPONDENT ACCORDING TO THE QUANTITY

OF DUNG USED FOR GOBAR GAS PLANT

Sr. No.	Quantity of dung used daily	Respon- dents	Percen- tage
1.	Upto 25 Kg.	03	03.03
2.	25 to 50 Kg.	51	51.51
3.	50 to 75 Kg.	40	40.40
4.	75 to 100 Kg.	04	04.04
5.	100 Kg. and above	01	01.01
 	Total :	99	

Source: Information collected through personal interviews.

The figures in the above table reveal that the majority of the respondents need 25 Kg. to 75 Kg. dung for the proper use of 91 (91.91%) gobar gas plants owned by equal number of respondents. Three respondents (3.03%) require dung upto 25 Kg. per day and 4 (4.04%) require 75 to 100 Kg. dung and only one respondent is having a big sized gobar gas plant requiring more than 100 Kg. dung for its utilization.

The dung used is collected from the domistacted animals owned by the respondents mainly and sometimes the dung is collected from the courtyard and other places.