

Success Story

RKVY Dairy Project

(Skill Empowerment Of Women In Dairy Cattle Management)

Gobar gas Plants Improve Life in Rural Area

Introduction:

In Kota district about 60 percent farm families depend directly on forest produce for Fire Wood and LPG Cylinders for their fuel requirements which exacerbates the effect of deforestation and involves considerable women drudgery and is a time consuming task.

Biogas plant turns dung and organic waste into a clean, non polluting, low cost fuel and organic manure which can be distributed in the fields. Gobar Gas is a smokeless domestic fuel which reduces the incidence of lung diseases and can be produced from cattle dung and other farm organic matters. Biogas slurry as liquid organic fertilizer is a better option to save the costly chemical fertilizers. Gobar gas plant do not only generate renewable energy, but also prevents methane emission, methane is a high impact green house gas and occurs when storing farm yard manure.



Installed HDPE Gobar Gas Plant at Farmers Field

Intervention :

Under RKVY Dairy Project, “Skill Empowerment Of Women In Dairy Cattle Management” Krishi Vigyan Kendra Kota has introduced family size, movable, floating type bio-gas plants with a capacity of 2.0 m³ made up of HDPE material. Installation of Gobar gas plants would directly replace the use of LPG cylinder, dung cake, firewood, and can provide an alternate source of energy and liquid organic fertilizer in rural areas.

Total 66 Gobar-gas plants, in villages of Panchayat Samiti ITAWA-02, SULTANPUR-25, LADPURA-33, and SANGOD-06 has been installed under RKVY Dairy Project. Villagers are utilizing gobar gas as their main fuel for cooking purpose (5 HOURS DAILY) in place of LPG cylinder and slurry as liquid fertilizer, this



Biogas Plant with Slurry Tank

has taken a step towards improving living standards of rural women in Kota district. The cow dung used for cake preparation is now being utilized to feed the bio-gas plant.

Outcomes:

Thus installation of gobar gas plant and availability of cooking gas, slurry can improve living standards in rural areas, reduces dependency on LPG cylinders, reduces time wastage in collecting firewood, reduce pollution, produce good quality enriched bio fertilizer to improve soil fertility and to promote organic farming. Further time thus saved is being efficiently utilized for livestock production and farm related activities by the women. All the gobar gas plants are working successfully.

Traditionally cow dung Cake has been used as fuel, today it is used to produce gobar gas and liquid bio fertilizer. Majority of the farmers has started distributing slurry as valuable fertilizer by stopping use of chemical fertilizers in their fields. One farmer has started sale of slurry as liquid fertilizer in 5 and 10 Kg bags to the urban households to use in flowerpots and lawn. Thus the slurry utilization reduced the dependency on chemical fertilizer and also improved soil health.



Green Fodder Production without Use of Chemical Fertilizer

Farmers are getting monitory benefits from 2.0 m³ Gobar gas plant as follows:

S. No.	Particulars	Annual Saving	Amt. Rs.
1.	Reduces dependency on LPG cylinders@ one per month	12 Nos.	8400
2.	Produces good quality enriched bio fertilizer to improve soil fertility @50 Kg per day	182.00 Qtl @200/Qtl	36400
3.	Reduces time wastage in collecting firewood/making dung cake @ 1.0 hour daily	45 man days @ 150/day	6750
4.	Promotion of Organic farming without , saving of chemical fertilizers @ Rs.2500/acre /year	1 acre each	2000
5.	Reduction in women drudgery	Total	53550

Likewise cost (Rs. 36000/-) of gobar gas plant installation can be meet out in first year. Initiation of Government regarding installation of family size gobar gas plants at each farmers house having five or more milch animals can minimize the requirement of LPG cylinders and can promote organic farming in villages.