



**Krishi Vigyan Kendra , Tikamgarh
J.N.K.V.V., Jabalpur (M.P.)**

**Thematic Area
Resource Conservation**



Natural Resource Management

Biogas plant

Profile

Village - Kanti
Block – Tikamgarh
District – Tikamgarh
No. of Households– 242
Cultivated land – 241ha.
No. of biogas plant – 105



Description of Innovation

Kanti was adopted as National Initiative on Climate Resilient Agriculture (NICRA) village of district Tikamgarh (M.P.) during 2010 by the KVK Tikamgarh. In this connection biogas plant were established in adopted village as per the availability of FYM due to large number of live stock population/ farmer. The biogas plant established in Kanti with the subsidy of Rs. 13500/- from the Central Government and State Government department and IFFCO unit. The motivation and technological backstopping were carried out through KVK scientists. Now total 105 biogas plants are smoothly working. The 64 farmer families who were cooking their food and in the health point of view eye diseases and other diseases are now reduced in farm women respectively from cough 27.78%, headache 23.08%, respiratory 18.18% and eye infection 28.57%. Secondly conservation of green forest also increase d because reduction in use of wood for cooking. Thirdly bio-gas slurry is using as nutrient management for production of vegetable. Before installation of biogas plants all households used animal dung for domestic purpose as cakes whereas 36.67% of the household sold animal's dung as waste/fuel/manure, only 16.67% of villagers have adequate knowledge of biogas technology before installation of biogas plants at their household. The plants have been provide per day 3 cubic meter biogas/plant i.e. total $3 \times 64 = 192$ cubic meter. The biogas slurry was obtained @ 25Kg/ plants/day i.e. $25 \times 64 = 1600$ kg/day. The biogas slurry used as fertilizer in vegetable production which play role to boost the production up to 20%.

Practical utility of innovation



The awareness has been increasing in villages regarding use of bio-gas plant. The use of bio-gas is of utmost importance in modern agriculture in order to sustain the soil health and to improve the quality of agriculture produce. This is not only saves about 25 % of the chemical fertilizers but also helps in improving the fertility status of soils. If people use biogas plants properly and use biogas energy for other activities along with cooking domestic food , the quantity of saving of fuel wood consumption is increase, biogas needs to be promoted more strongly to ensure a sustainable use of local resources and an improved quality of life for the rural people. Thus , the best utilization of FYM as balancing the saving the natural resources as well as human health