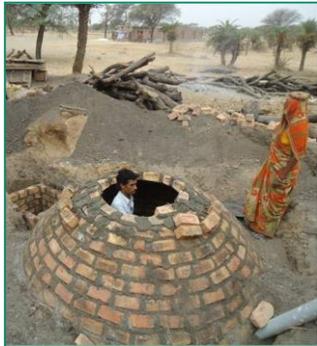


# BIO-GAS: MEETING ENERGY NEEDS THROUGH RESOURCE CONSERVATION

A CASE STUDY FROM BIRLA CELLULOSE – NAGDA, MADHYA PRADESH

Traditional Indian rural households use either wood or cow dung cakes to meet their cooking requirements. Although this is an age old method, it falls short in numerous ways.

Nagda is a small tehsil in Ujjain district that uses these methods to meet their cooking energy requirements. As Nagda falls in a semi-arid zone, the use of wood not only contributes to the depletion of greenery in the surrounding areas, but also contributes to air pollution.



Similarly, Makla, a small village situated around 11 kms from Nagda, also uses traditional chullas where wood and cow dung cakes are used for cooking. Numerous women in villages suffer from poor health and children are required to devote the majority of their time to gathering wood rather than focusing on their education.

In order to combat these problems, we engaged in discussions with farmers from Nagda and Makla. After multiple rounds of discussions and exposure visits to successful bio-gas plant models, one household finally agreed to construct a bio-gas plant.

We contacted the Khadi and Gram Udhoyog (KVIC) to construct bio-gas plants, wherein the company and benefitting household also contributed. The first plant had a tremendous impact on the surrounding households. Seeing the success of initial plant, more community members began showing willingness to construct bio-gas plants. Within a month, nine more plants were constructed in the nearby area.



Now, these households use only the gas provided via the plants for cooking.



Apart from the ecological impacts, there have been other numerous benefits that can be credited to the bio-gas plants. Women's health has drastically improved as they are no longer exposed to smoke, and children can now attend school without any hindrance.

The slurry of bio-gas is also an excellent manure that farmers use in their fields to improve the health of their soil.

