

Samagra Vikas Mission

Promoting Bio Gas Plants as an Alternative for Cooking Energy and a Home Lighting System in Jharkhand, India

Samagra Vikas Mission, based in the state of Jharkhand, India, focuses on developing renewable energy systems to increase access to energy in rural parts of Jharkhand, a state in central India with a high population of tribal communities and one of the lowest electrification rates in the country. The organization has expertise in building bio gas plants—for the past eight years they have focused on this work—and has found that the traditional construction (using a concrete drum) has been expensive and had technical issues. Instead of the traditional method supported by government initiatives, this project explores the use of a plastic drum and increased training for end users on how to best use the small units.



The need for this type of project is that tribal families in the rural areas in most of Jharkhand rely on wood for cooking and kerosene for lighting. Not only are these fuel sources expensive, they also emit fumes and smoke in the household and are less efficient than a gas source. Gas-based lighting is a higher quality and safer than kerosene; a gas stove reduces the pressure on collecting firewood from the forests in the area.



Gas-based lighting and cooking applications

Samagra Vikas Mission will work with farmers in Jharkhand to educate them on the opportunities of bio-gas (from cow dung) for cooking and home lighting systems. This will be done through 15 total awareness camps in 3 villages; construction of 73 biogas plants in chosen households; training on how to use the plants; and monitoring and evaluation of the plants and the program in general.

Samagra Vikas Mission will also work with local government development offices to showcase this alternate method of bio-gas plants and highlight successes of this project. Pending government support, they hope for potential future subsidies for additional plants.

