Introduction

Growth of population and consumption of energy is proportionally high, therefore nonconventional energy is alternate source for conventional energy. Biogas is one of them. It is a renewable energy source from biomasses, and mainly comprises of a hydrocarbon, which is combustible like any hydrocarbons and can produce heat and energy when burnt. The major combustible component of biogas is methane (CH\textsubscript{4}). Biogas is produced through a biochemical process in which some bacteria convert the biological wastes into useful biogas through chemical interaction.

In the present era of ever-increasing energy consumption and dwindling fossil fuel reservoir, the importance of biomass based decentralized fuel such as biogas and biomass based power generation has greatly increased. It is well-established renewable and environmentally friendly fuel for rural energy needs. Biogas is ideally suited for rural applications where required animal or human excreta and agricultural waste is available plenty. If we live in an area where livestock are kept, and there is sufficient water supply, then a household biogas system- which takes waste and makes energy could help meet your household’s needs.

In India, the biogas technology has started as early as 1950s and it’s development on experimental basis was taken up only during 1960s. The actual construction of plants began during this period with the Directorate of Agriculture Extension under the Ministry of Agriculture, sponsoring a few plants. The national project on biogas development of the Ministry of Non-conventional Energy Sources, was started in 1981–82 for promotion of family type biogas generation plants. The current potentiality of gas which is estimated at 12 million family, to provide clean alternate fuel to the rural masses and enriched organic manure for agriculture.

The Sangli is one of the leading districts in Maharashtra state in every aspects. In Sangli district the Biogas technology started from 1982-83. There are 37141 biogas plants were completed before March 2011. The number of working plants are 35269. The percentage of working plants is 94.69%. The district occupy 731 villages out of them 623 villages are run biogas plant programme.
It is necessary to operate the biogas plants effectively for getting maximum performance. As such, there is no any mechanism for observing the operational performance of the biogas plants at the route level. Considering above fact I have selected this topic for further investigation.