Hypotheses

1) **Biogas energy is very easily available in every farmer who practiced catal farming.**
   About 90 per cent farmers were practiced catal farming for the production of milk as well as bio – fertilizers & other biological production like biogas, biolight etc.

2) **There are no regular economic charges for the consumption of biogas.**
   Only fundamental investment for the construction of such plant is observed, when completing the construction of biogas plant & inlathe animal of manure or slurry in the plant immediate after 4 -5 days gas will be energy

3) **Domastic cooking is the main purpose of household biogas plant in study area.**
   The farmers which land holding capacity is low they are mostly prefer such type of plant for their domastic cooking.

4) **Biogas Plant runs based on cattle manure in the study region.**
   There are no use of slaughterhouse material & vegetable waste for the making of biogas in the study region.

Research Methodology

Keeping in view the objectives of the study and for testing the hypothesis, both primary as well as secondary data will be collected through instruments structured at various levels. While the secondary data will be collected through District, Block, Village, Implementing Agency and Regional Biogas Training Centre schedules, the primary information will be collected through beneficiary and nonbeneficiary schedules. Besides, formal and informal discussions will also be held by the field teams with the nodal departments to ensure accuracy of the data. By using
proper statistical methods, the data will be analyzed scientifically and result output will be implemented.

**Scope of the Study**

This research work will analyze the existing biogas plants for their performance by dividing the district into various zones like hilly area, heavy irrigated area, Saline alkali soil areas and drought-prone areas and then according to the findings finally best solution for implementation will be suggested. This research will recommend the measures to obtain the systematic approach for implementation, in the area of Sangli District of Maharashtra State.

**Study Region**

The district Sangli is located in the western part of Maharashtra. The district is extended from 16° 45’ N to 17° 22’ N latitude and 73° 42’ E to 75° 40’ E longitude. Maximum East West extension is 205 Kms. In north - south it has varying length from 10 to 20 Kms. The total area of the district is 8572 sq kms. The district is bounded by Satara & Solapur district at the north. Ratnagiri district at the west. Bijapur district to the east & Kolhapur & Belgaum districts to the south. Sangli district is situated in the river basin of Warna, Krishna & it’s tributaries is one of greatest area of country.

There is various land – forms in Sangli district. The major part of the Krishna River basin is plane. There are Dandoba, Honai, Shukacharya, Mallikarjune, Kamalbhairav hill range. The eastern part of district is a plateau.

The climate in Sangli district is generally hot & dry. The Western hilly regions receive more rain. The amount of rainfall goes on decreasing towards the East in Sangli district. More rains in Shirala Walwa, taluka. While it rains less in Jath, Atpadi, Khanapur, Kavate – Mahankal Taluka.

**Research Design**

The proposed research design of the work will be in following manner.
Work Plan

The plan for completion of research work as follow---

1st six months : Reading Review of Literature, preparation of questionair and start

The collection of data.

2nd Six month : Data collection through field work and other source

3rd Six month : Tabulation, preparation of maps, analysis of data with proper

Techniques etc.

4th Six month : Thesis writing, typing, buiding etc.