

## **Key Project Information**

### **Details of the Project and its design:**

Biogas Service Center (BSC) along with VNV Advisory Services is promoting household biogas systems in rural parts of Assam. The project intends to avail the households with clean cooking solutions; thereby, displacing less efficient traditional cooking stoves from the kitchen with biogas systems. The Replacement of the traditional cooking stoves with biogas system will not only reduce firewood consumption but also reduce exposure of the family members, specifically women, to the indoor air pollution.

### **Its proposed timetable:**

The project considers household biogas systems installed from March 2020 onwards in various parts of Assam. The project covers deenbandhu model biogas system of 3m<sup>3</sup> size. The implementing agency will obtain necessary right to trade the emissions reductions attributed to the project units. The project targets to cover 5,000 biogas systems.

### **Social, economic and environmental benefits and impacts:**

The project positively benefit towards a) Good health and well being; b) Clean Energy and c) reducing CO<sub>2</sub> emissions in the environment.

In domestic sector, household air pollution is one of the biggest health risks in India which is largely attributed to the use of solid biomass, mainly firewood, for cooking and heating. This way of using biomass causes premature deaths. Health safety concerns from open fire traditional cookstoves are additional risks faced by poor households contributing to a substantial percentage of subsequent injuries. Moreover, these traditional cookstoves are also the major source of environmental problems like air pollution, deforestation, and climate change and biodiversity loss. The nexus of firewood consumption with the indoor air pollution and greenhouse gas (GHG) emission is well established. Specifically, the firewood sourced from forest does not entirely come from the forest area that is renewable. Therefore, the firewood consumed is fossil in origin that results in irreversible emissions of GHGs. By use of biogas the firewood consumption will be reduced which in a way improve the indoor air pollution and therefore health of family members.

In comparison to traditional cookstove, biogas system provides clean energy solution as biogas is cleaner compared to traditional cook stoves which has low efficiency.

In addition, the project is expected to reduce on an average 20,000 tCO<sub>2</sub> emissions from atmosphere annually.

Therefore, the project has socio, economic and environmental benefits