

## **Gobar-Dhan Implementation in Rural Areas of District Bijnore**

Currently cattle dung and a portion of agricultural waste is used as cooking fuel. However, WHO estimates about 5 lakh deaths in India alone due to indoor air pollution caused by unclean cooking fuel. Women and children suffer the most, as they spend large amounts of their time near indoor cooking hearth. India has the highest cattle population in the world (300 million) that produces around 3 million tonnes of dung. The 2014 ILO report mentions that the productive utilization of dung could create 1.5 million jobs nationally and farmers can get considerable income from cow dung sale. The scheme is meant for the better utilization of such potential.

Bio-gas, the most common form of bio-fuel, is a clean form of energy and can be obtained from cattle dung, poultry droppings, crop residue, kitchen waste, etc. Gobar-Dhan shall benefit rural people in general and women in particular from this clean fuel and also through improvements on health and improvement in cleanliness in the villages. This initiative shall support biodegradable waste recovery and conversion of waste into resources. This shall provide economic and resource benefits to farmers and households and also support creating clean villages which is the objective of Swachh Bharat Mission (Gramin)

### **objective**

The objective of the scheme is to increase rural income, rural jobs and to keep villages clean through solid waste management.

Accordingly, this scheme aims to positively impact the Gram Panchayats with 3Es, which are as following:

- **Energy** : Self-reliance with respect to energy through utilization of agricultural and animal waste to generate bio-energy through bio-gas plants.
- **Empowerment** : Engaging rural people, especially women self-help groups in construction, management and day to day operations of biogas plants.
- **Employment** : Generating jobs among the rural youth and women through collection of waste, transportation to treatment plants, management of treatment plant, sale and distribution of biogas generated, etc.

### **The potential benefits of the scheme**

- Encourage farmers to realize the uses of cow dung and consider the dung and other farm waste as a source of income, instead of neglecting it as wastes.
- dual benefits of clean and sanitized villages as well as improved farm yields and livestock health.
- beneficial for entire people in villages by keeping the villages clean and sanitized, improved health of livestock and an increase in farm yields.
- Biogas generation will help in increasing self-reliance in energy which is utilized for cooking and lighting in the villages
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- create new job opportunities for waste collectors, transporters, bio-gas operators, sellers etc.
- Enable a stable supply of fuel for oil companies.
- also provide entrepreneurs with accessible credit through government schemes and banks.
- Villagers organized to form SHGs and creative societies in order to support clean energy and green jobs initiative.
- Facilitate uninterrupted supply of power in rural areas.
- Improve soil fertility and thereby improve the productivity of crops.
- Help prevent diseases affecting farm animals in the villages due to wastes and unsanitized farms.
- Help in mainstreaming women in development activities of the village such as collecting and packaging of cow dung for transportation.
- More importantly, Gobardhan will help mitigate climate change by means of reducing the emission of methane (the potent greenhouse gas) from the cow dung through effective processing.

#### **The challenges in the implementation**

- The major challenge is to convince farmers that their cattle waste is a source of income and will keep their communities clean.
- Collection of cattle waste and maintaining a regular supply of plant operators will also be a challenging task.
- Biogas plants to be set up should have better technology that is sustainable and widely accepted by farmers and women in rural areas. Proper training should also be given to workers.
- Fodder production for the cattle is poor in India and needs to be improved to feed cattle and in result getting more cow dung.
- Increasing adoption of farm mechanization will result in decreasing number of cattle population and will make the gobardhan business unviable for the farmer in the long run.

#### **Way forward**

- There is a need to change the attitude of farmers to think that cattle dung can be a source of income through proper community led awareness programmes.
- Effective implementation of the scheme requires investments from the private sector and local entrepreneurs.
- Panchayats and villages communities will need to play an active role in leveraging the wastes generated from farm sites.
- There is a need for effective training and licensing mechanism to integrate the informal sanitation service providers into the system.
- There is also a need to create farmers market or a trading platform where farmers can trade fodder with each other.
- Furthermore, the political will and strong public demand for a cleaner, healthier environment will prove to be a better force in driving this programme a massive success.

