

PRESS INFORMATION BUREAU

(Research Unit) Ministry of Information and Broadcasting Government of India



Frequently Asked Questions (FAQs)

GOBAR – DHAN: Waste to Wealth

(Galvanizing Organic Bio-Agro Resources-Dhan)

Safe management of cattle waste and other organic waste

(Ministry of Jal Shakti)

March 16, 2022

1. What is GOBAR-DHAN Scheme?

GOBAR-Dhan¹ (Galvanizing Organic Bio-Agro Resources- Dhan) was launched by the Government of India in April 2018 as a part of the Biodegradable Waste Management component under Swachh Bharat Mission (Grameen) (SMB-G) to positively impact village cleanliness and generate wealth and energy from cattle and organic waste. The main focus of GOBAR-Dhan is to keep villages clean, increase the income of rural households, and generate energy and organic manure from cattle waste. GOBAR-Dhan has been designed to provide a common platform for schemes of different Ministries/Departments such as the Ministry of New and Renewable Energy (MNRE); Ministry of Petroleum and Natural Gas (MoPNG); Department of Animal Husbandry and Dairying; Department of Agriculture, Cooperation and Farmers Welfare; Department of Rural Development; and Department of Drinking Water and Sanitation (DDWS).

2. What are the objectives of GOBAR-Dhan schemes?

The objectives of this scheme² are:

- To support villages safely manage their cattle waste, agricultural waste and in the long run all organic waste;
- To support communities in converting their cattle and organic waste to wealth using decentralized systems;
- To promote environmental sanitation and curb vector borne diseases through effective disposal of waste in rural areas;
- To convert organic waste, especially, cattle waste, to bio gas and fertilizer for use in rural areas.

¹ https://sbm.gov.in/gbdw20/images/Framework/Gobardhan Framework.pdf

²https://sbm.gov.in/gbdw20/SLRM AboutUs.aspx

• <u>To promote rural entrepreneurship by involving entrepreneurs</u>, SHGs and Youth Groups in the setting up and operation and management of biogas plants

3. What are the guiding principles of implementing GOBAR-Dhan scheme?

GOBAR-Dhan would be implemented as a people's initiative to make use of animal dung in villages. The community would lead the <u>planning</u>, <u>implementation</u>³ and management of the GOBAR-Dhan scheme.

- Intensive IEC at the local level would be undertaken to promote the benefits of GOBAR-Dhan and the need for community collective action on it. The infrastructure should be such that it can be owned, operated and managed by the members of the community themselves.
- It would address the compelling need for the safe management of cattle dung and other
 organic waste to be popularized amongst the rural population by the State, District and
 Block administration so that people realize the importance of the GOBAR-Dhan
 initiative.
- Villages with a high population of cattle would be taken on priority. There would be
 optimum utilization of available financial resources to cover maximum households and
 to get the maximum benefit from it.
- GOBAR-Dhan infrastructure would be such that it can be owned, operated and managed by the members of the community themselves.
- There would be optimum utilization of available financial resources to cover maximum households and to get the maximum benefit from it.

4. How is the GOBAR-Dhan scheme implemented?

<u>Department of Drinking Water and Sanitation (DDWS)</u> is the <u>coordinating Department for implementing schemes for setting up biogas plants.</u> DDWS also provides technical and financial assistance to States/UTs for the implementation of GOBAR-Dhan projects under SBM-G.

GOBAR-Dhan can be implemented by Gram Panchayats through Self-Help Groups (SHGs) / Farmers Producers Organisations / Community Based Organisations (CBOs) developed under DAY-NRLM/Milk Cooperatives / Milk Unions / Agencies selected or empanelled by States or Districts / Biogas Development and Training Centres (BDTCs), etc.

• District

- ➤ The district will be the nodal agency for planning, implementation, monitoring and approval of GOBAR-Dhan projects.
 - The district will have the flexibility to decide implementation mechanisms.
- ➤ Districts can take up model projects at District/Block level or household, cluster and community models within a GP.

³https://sbm.gov.in/gbdw20/Documents/GobardhanFramework.pdf

• Gram Panchayat (GP)

- ➤ The GP has to identify the potential beneficiary for the household/cluster and community level projects. It will work with cooperatives, milk unions, Farmer Producer Organizations (FPOs), SHGs, CBOs developed under DAY-NRLM, Private entrepreneurs, etc., for the identification of beneficiaries and also for implementation of GOBAR-Dhan projects.
- ➤ The GP will identify a suitable location for community projects through a Gram Sabha resolution

5. What are the various models of GOBAR-Dhan?

GOBAR-Dhan projects envisaged under SMB-G can be classified under four broad models:

• Individual Household⁴

This model can be adopted by households which have three or more cattle. The biogas and slurry generated from the plants are used for cooking and as manure by the households.

• Community

The biogas plants can be constructed for a minimum number of households (five to ten). The plants can be operated and managed by GP/SHGs. The gas generated will be supplied to households/restaurants / institutions and slurry can be used by the community as organic manure in agriculture or sold to farmers.

Cluster

In this model, individual biogas plants are installed in number of households in a village/ group of villages. The biogas generated is used by the households and the slurry is collected at a common place, separated to solid and liquid parts and then fortified and sold as bio-fertilizers.

• Commercial Compressed Biogas (CBG)

CBG plants can be set up by Entrepreneurs / Cooperative Societies / Gaushala's etc. The raw biogas produced is compressed and can be used as vehicular fuel and / or sold to industries. The slurry generated is converted into organic manure / bio-fertilizer and can be sold to farmers.

6. What are the benefits of GOBAR - Dhan?

The benefits of this scheme⁵ are:

• Environment friendly - GOBAR-Dhan helps in managing a major portion of solid waste in villages' i.e., cattle dung and agricultural waste and promotes environmental sanitation.

⁴https://sbm.gov.in/gbdw20/SLRM AboutUs.aspx

⁵https://sbm.gov.in/gbdw20/images/Framework/Gobardhan Framework.pdf

- Protects health Substantially reduces vector-borne diseases and promotes public health.
- **Improves Savings** Promotes household income and saving as the use of biogas reduces the expenditure on LPG.
- **Boosts productivity** Helps in generating organic manure which enhances agriculture and farm productivity.
- **Increases Employment** Promotes employment and income generation opportunities for Self-Help Groups (SHGs) / farmers groups.
- **Reduces Carbon Footprint** Helps in reducing carbon emission and promotes environmental sustainability.
- Saves foreign exchange By reducing the need for the import of natural gas.

7. Why is the GOBAR - Dhan scheme required in rural India?

Rural India generates enormous quantities of bio-waste which are currently burned or inefficiently utilized, leading to environmental and public health issues. Successful implementation of GOBAR-Dhan is expected to promote community awareness and ownership, and help villages manage the cattle dung, agricultural residues and other organic waste.

8. What are the major applications of biogas plant?

Biogas plant produces biogas and bio manure. <u>Biogas</u>⁶ can be used for thermal application like cooking, lighting and power generation through diesel/petrol gensets. **Bio manure** can be used as fertilizer in agriculture. Bio manure increases annual grain yield.

9. What does Bio CNG mean? What will be the major application area for Bio-CNG?

<u>Bio - CNG</u>⁷ can be injected into the gas network or compressed for use in natural gas vehicles. Once fed into the gas network, it can provide domestic or commercial cooking and heating, or be used as vehicle fuel in locations remote from the source of the gas.

10. What are the uses of biogas slurry?

- Increase of micronutrients in the soil.
- Improved drainage and better aeration to the root system.
- Improvement in the soil structure
- Biogas slurry is also being used for fish culture, which acts as a supplementary feed.
- <u>Biogas slurry</u>⁸can be also used for the production of bio fertilizers like *Azolla* and aquatic biomass *Spirulina*.

⁶https://drsjk.jk.gov.in/pdf/GOBAR%20DHAN%20guidelines.pdf

⁷https://drsjk.jk.gov.in/pdf/GOBAR%20DHAN%20guidelines.pdf

⁸https://drsjk.jk.gov.in/pdf/GOBAR%20DHAN%20guidelines.pdf

11. Are there any criteria for selection of best site for installation of biogas plant?

Following points should be considered while selecting a site for installation of biogas plant:

- The site for biogas plant should be at higher level as compared to the surroundings, so that there should not be ⁹accumulation of water near the biogas plant.
- Biogas plant should be installed at least two meters away from the foundation of the house to avoid cracks in the building.
- Biogas plant should be installed near the kitchen and animal shed to save cost of delivery gas pipe and carriage of dung.
- Biogas plant should be installed in the open space.
- Biogas plant should be installed underground to avoid the cracks in the dome (gas holder).

References

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- https://sbm.gov.in/gbdw20/Documents/GobardhanFramework.pdf

AG/HP/RC/RN/DG

⁹https://drsjk.jk.gov.in/pdf/GOBAR%20DHAN%20guidelines.pdf