GOVERNMENT OF INDIA MINISTRY OF NEW AND RENEWABLE ENERGY RAJYA SABHA UNSTARRED QUESTION NO. 2861 ANSWERED ON 25.03.2025

BIOGAS PRODUCTION FROM ORGANIC WASTE IN ODISHA

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Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

(a) whether Government has any plans to promote biogas production from organic waste in Odisha given the State's significant agricultural sector;

(b) if so, the steps Government has taken to support the establishment of biomass power plants in Odisha;

(c) the financial incentives or subsidies available to encourage such projects; and

(d) the specific measures being taken to support the establishment of small-scale biogas plants in rural Odisha, and the role these plants can play in providing electricity and fuel for rural communities?

ANSWER

THE MINISTER OF STATE FOR NEW & RENEWABLE ENERGY AND POWER

(SHRI SHRIPAD YESSO NAIK)

(a) & (b) Yes. The Government of India is promoting biogas production by utilizing organic wastes for setting up of biogas plants in the country, including in State of Odisha by implementing the following schemes/ programmes.

- (i) **The Ministry of New and Renewable Energy (MNRE)** supports installation of small, medium and large size biogas plants under two different components of National Bioenergy Programme (NBP).
- (ii) Ministry of Jal Shakti, Department of Drinking Water and Sanitation launched Galvanizing Organic Bio-Resources Dhan (GOBARdhan) under Swachh Bharat Mission Grameen Scheme (SBM(G)) to ensure cleanliness in villages by converting biodegradable waste into biogas and organic manure; and
- (iii) **Ministry of Rural Development** has been supporting the installation of biogas plants for individual users under the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) 2005.

(b)& (c) MNRE supports the installation of Biomass based power projects under the Biomass Programme (Scheme to Support Manufacturing of Briquettes & Pellets and Promotion of Biomass (non-bagasse) based cogeneration in Industries). The details of Central Financial Assistance (CFA) being provided for Biogas and Biomass power projects under the schemes/ programmes of Government of India are placed at **Annexure-I.**

- (d) The specific measures being taken under the Biogas Programme for setting up of biogas plants towards providing clean cooking fuel and other associated benefits in the State of Odisha, inter-alia, include:
 - (i) Allocation of annual physical targets by MNRE to all State/UTs including the State of Odisha for installing small-scale biogas plants at the beginning of each financial year;
 - (ii) Provision for higher CFA for beneficiaries of Scheduled Caste, Scheduled Tribes and registered Gaushalas/Shelters;
 - (iii) Provision of an additional CFA for small biogas plant if linked with biogas slurry filter units and sanitary toilet; and
 - (iv) Kalinga Institute of Industrial Technology (KIIT), Bhubaneswar is the dedicated Biogas Development and Training Centre for conducting various trainings towards creating awareness among biogas users and for providing technical assistance to the Biogas Programme Implementing Agency in the State of Odisha.

REFERRED TO IN REPLY TO THE RAJYA SABHA UNSTARRED QUESTION NO. 2861, PART (b) & (c) TO BE ANSWERED ON 25.03.2025 ON "BIOGAS PRODUCTION FROM ORGANIC WASTE IN ODISHA'.

Details of Central Financial Assistance (CFA) being provided for Biogas and Biomass based power projects under the schemes/ programmes of Government of India

(i) **CFA Support for small size biogas plants** size 1 to 25 M³ biogas generation per day. <u>Table-I</u>

| Sr. | Particulars of Central Financial | Biogas | Plants u | nder Biog | gas Progr | amme ra | nging |
|-----|---------------------------------------|--|--------------------|--------------------|---------------------|---------|----------------|
| No | Assistance (CFA) and States / UTs, | from size 1 to 25 cubic Metre biogas per | | | | | |
| | regions & categories of beneficiaries | day (Amount in ₹ per plant) | | | | | |
| 1 | CFA Applicable | 1 M ³ | 2-4 M ³ | 5-7 M ³ | 8-13 M ³ | 14-19 | 20-25 |
| | | | | | | M^3 | M ³ |
| | Hilly/NER States (Arunachal Pradesh, | 17,000 | 22,000 | 29,250 | 34,500 | 63,250 | 70,400 |
| | Assam, Himachal Pradesh, Jammu & | | | | | | |
| | Kashmir, Ladakh, Manipur, Meghalaya, | | | | | | |
| | Mizoram, Nagaland, Sikkim, Tripura | | | | | | |
| | and Uttarakhand) | | | | | | |
| | Island; and | | | | | | |
| | Scheduled Castes (SC)/ Scheduled | | | | | | |
| | Tribes (ST). | | | | | | |
| 2 | All other States and Categories | 9,800 | 14,350 | 22,750 | 23,000 | 37,950 | 52,800 |

(ii) CFA Support for Medium size biogas plants size above 25 M³ to 2500 M³ biogas generation per day.

<u>Table-II</u>

| Power | CFA** limited to the following | | Administrative Charges for | | | |
|------------------|--------------------------------|---------------|----------------------------|---------|--|--|
| generating | ceiling limit | ceiling limit | | PIA* | | |
| Capacity (kW) | Power | Thermal | Power | Thermal | | |

| | Generation | Application | Generation | application |
|---------------------|--------------------|---|------------------------|------------------------|
| 3 kW - 50 | ₹ 45,000 | ₹ 22,500 per | 10% of | 5% of the |
| kW | per kW | kWeq thermal/ cooling | the CFA | CFA |
| >50 kW - | ₹ 40,000 | ₹ 20,000/- per kWeq | ₹2,00,000/- | ₹1,00,000/- |
| 200 kW | per kW | thermal/ cooling | (fixed) | (fixed) |
| >200 kW – 250 kW | ₹ 35,000 per kW | ₹ 17,500/- per kWeq thermal/ cooling | ₹2,50,000/- (fixed) | ₹1,00,000/- (fixed) |

**** Special Incentives for NER, Island, Registered Gaushalas; and SC/ST**: An incentive of 20% over and above the CFA mentioned in Table.

(iii) CFA Support for large biogas plants of size above 2500 M³ biogas generation per day.

| Large Size biogas plants, | CFA (Amount in ₹) |
|------------------------------------|--|
| above 2500 M ³ per day) | |
| Biogas generation | ₹ 0.25 Crore per 12000cum/day (maximum CFA of Rs 5.0 Crore/ Project) |
| BioCNG generation | ₹ 4.0 Crore per 4800 kg/day (for BioCNG generation from new |
| | biogas plant) |
| | ₹ 3.0 Crore per 4800 kg/day (for BioCNG generation from existing |
| | Biogas plant) |
| | Maximum CFA of ₹ 10.0 Crore/ Project for both cases |
| Power generation based | ₹ 0.75 Crore/MW (for power generation from new biogas plant) |
| on Biogas | ₹ 0.5 Crore /MW (for power generation from existing Biogas plant) |
| | -Maximum CFA of ₹ 5.0 Crore/ Project for both cases. |

<u>Table-III</u>

(iv) CFA Support for setting up of Biomass based energy projects

| Biomass Programme | CFA (Amount in ₹) |
|---|---|
| Briquette manufacturing plants | ₹ 9.00 Lakhs/ TPH (Maximum CFA- ₹ 45.00 Lakh per project). |
| Non-Torrefied Pellet manufacturing plant | ₹21.00 lakhs/MTPH production capacity or 30% of the capital cost considered for plant and machinery of 1 TPH plant, whichever is lower (Maximum ₹105 lakhs per project) |

| Torrefied Pellet manufacturing plant | ₹42.00 lakhs /MTPH production capacity or 30% of the capital cost considered for plant and machinery of 1 TPH plant, whichever is lower (Maximum ₹ 210 lakhs per project) |
|--------------------------------------|--|
| Non-Bagasse Cogeneration | ₹40 Lakhs/ Megawatt |
| Projects | Maximum CFA- ₹ 5.00 Crore per project). |

(v) : CFA under GOBARdhan:

Under Phase-II of SBM (G), financial assistance of up to ₹ 50.00 lakh per district is available for the complete programme period from 2020-21 to 2025-26 for setting up of community level biogas plant under GOBARdhan.

(vi): Support for construction of small biogas plant under Mahatma Gandhi National Rural Employment Guarantee Scheme:

As per Schedule I of Mahatma Gandhi NREGA Section 4 (3), Para 4 (1), II. Category: B (Community assets or Individual assets) for vulnerable sections (only for households in Paragraph 5), (vii) Construction of bio-gas plant for individual; and (viii) Unskilled wage component towards the construction of bio-gas plant for community are permissible activities.

As per Mahatma Gandhi NREGA operational manual for construction of bio gas plant, construction of Biogas plant of capacity of 2 cubic meter for individual beneficiaries eligible as per Schedule-I, para 5 of the Act and the unskilled wage component for the community Biogas plant is permissible under Mahatma Gandhi NREGA.