

GOVERNMENT OF INDIA  
MINISTRY OF NEW AND RENEWABLE ENERGY

LOKSABHA  
UNSTARRED QUESTION NO 1701  
TO BE ANSWERED ON 28/11/2019

**BIO-ENERGY POTENTIAL**

+1701. SHRI SUMEDHANAND SARASWATI

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

- (a) the details of the schemes proposed by the Government for exploration of bio-energy potential in the country;
- (b) the status of power production from the said energy sources. State/ UT-wise;
- (c) whether the bio-energy plants are functional in rural areas of the country and if so, the details thereof and if not, the reasons therefor;
- (d) whether the Government proposes to increase the number of bio-gas plants set up in the country;
- (e) if so, the details thereof and if not, the reasons therefor;
- (f) whether the Government is implementing any scheme to set up bio-gas plants in each house of every farmer in the country; and
- (g) if so, the details thereof and if not, the reasons therefor?

**ANSWER**

THE MINISTER OF STATE (I/C) FOR NEW & RENEWABLE ENERGY, POWER and MoS for SKILL DEVELOPMENT AND ENTREPRENEURSHIP

(SHRI R. K. SINGH)

(a) The Ministry of New and Renewable Energy (MNRE) has formulated following schemes for harnessing potential of Bio-Energy in the country:

- (i) New National Biogas and Organic Manure Programme (NNBOMP)
- (ii) Biomass Power and Bagasse Cogeneration Programme
- (iii) Biomass Gasification Programme
- (iv) Biomass Cogeneration (Non-bagasse) in Industry
- (v) Energy recovery from Urban and Industrial Wastes including Agriculture Waste/residue and cattle dung
- (vi) Biogas based Power Generation (Off-grid) and Thermal energy application Programme (BPGTP) in the capacity range of 3 kw to 250 kw.

Under the above schemes, the Ministry provides Central Financial Assistance for setting up plants/projects besides providing support for programme implementation, information dissemination, trainings, R&D etc.

(b) The State/UT-wise details of Bio-Energy projects for power generation installed under the above schemes/programmes are given in **Annexure-I**.

(c) Biomass power & cogeneration plants are installed mainly in rural areas of the country and more than 500 plants have been set up with a total installed capacity of 9.8 GW. The technologies for the recovery of energy from Biomass are well established and with

sustained supply of requisite quality feedstock and proper Operation & Maintenance of plants on regular basis, these plants function properly and efficiently.

As per an independent third party evaluation study conducted for the National Biogas and Manure Management Programme (NBMP), which was operational during the period from 2012-13 to 2016-17 (12<sup>th</sup> Five Year Plan Period), an overall functionality rate of about 96.5 % has been observed in 10 States. The State-wise details of operational and non-operational plants have been given in **Annexure-II**.

(d) & (e) Yes, Sir. The Ministry of New and Renewable Energy is implementing a Central Sector Scheme, the New National Biogas and Organic Manure Programme (NNBOMP) for setting up small biogas plants, based on cattle dung and other mixed wastes in remote, rural and semi-urban areas of the country. Under the NNBOMP, a target of setting up 76,000 small biogas plants has been fixed for the current year, 2019-20. The State/UT-wise details of targets fixed for the current year are given in **Annexure-III**.

(f) & (g) Under the National Programme for Biogas Development, since inception till 2019-20, a cumulative total of about 50.02 lakh small household size biogas plants have been installed in the country and majority of the beneficiaries have been the farmers. During the current year, 2019-20, a target of setting up 76000 small biogas plants under the NNBOMP scheme has been allocated to all States/ UTs. The details of targets set are given in **Annexure-III**.

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**ANNEXURE-I, REFERRED TO IN REPLY TO PART (b) OF THE LOK SABHA UNSTARRED QUESTION NO. 1701 FOR ANSWERING ON 28.11.2019 ON “BIO-ENERGY POTENTIAL”****State / UT-wise Bio-Energy Projects installed for Power Generation**

Sr. No	State/ UT	Waste to Energy (As on 30.10.2019) (in MW)	Biomass Power + bagasse Co-generation (As on 30.09.2019) (in MW)	Biomass co-generation (non-bagasse) (As on 30.09.2019) (in MW)	Biogas Power Generation (Off- grid) Projects (MW <sub>e</sub> ) (As on 30.09.2019)
1.	Andhra Pradesh	40.82	378.20	98.98	0.466
2.	Bihar	0	113.0	8.20	0
3.	Chhattisgarh	0.33	228.0	2.50	0
4.	Delhi	52	0	0	0
5.	Gujarat	11.275	65.30	12.0	0.02
6.	Haryana	4	121.4	84.26	0.135
7.	Himachal Pradesh	0	0	7.20	0
8.	Jharkhand	0	0	4.30	0
9.	Karnataka	7.8	1811.60	15.20	1.570
10.	Kerala	0	0	0.72	0.124
11.	Madhya Pradesh	15.4	93.0	12.35	0.06
12.	Maharashtra	28.713	2499.70	16.4	0.825
13.	Meghalaya	0	0	13.80	0
14.	Odisha	0	50.4	8.82	0.006
15.	Punjab	14.92	194.0	123.1	0.922
16.	Rajasthan	3	119.3	2.0	0.0075
17.	Tamil Nadu	10.45	969.0	28.55	1.971
18.	Telangana	19.50	158.1	1.0	0.208
19.	Uttar Pradesh	44.625	1957.5	158.01	0.679
20.	Uttarakhand	1.89	73.0	57.5	0.073
21.	West Bengal	0	300.0	19.92	0.06
	Total	254.73	9131.0	674.81	7.126

**ANNEXURE-II, REFERRED TO IN REPLY TO PART (c) OF THE LOK SABHA UNSTARRED QUESTION NO. 1701 FOR ANSWERING ON 28.11.2019 ON “BIO-ENERGY POTENTIAL”**

**Overall Operational Status of Biogas Plants set up during 12<sup>th</sup> Five Year Plan Period (2012-13 to 2016-17) under the National Biogas and Manure Management Programme (NBMMP)**

<b>Operational Status - Overall Plants</b>						
<b>Sl. No.</b>	<b>States</b>	<b>Total</b>	<b>Not Operating</b>	<b>Operating</b>	<b>% of not operating</b>	<b>Operating biogas plants (%)</b>
1	Assam	1345	129	1216	9.6%	90.4%
2	Chhattisgarh	539	46	493	8.5%	91.5%
3	Gujarat	487	7	480	1.4%	98.6%
4	Kerala	577	2	575	0.3%	99.7%
5	Maharashtra	2747	4	2743	0.1%	99.9%
6	Odisha	657	31	626	4.7%	95.3%
7	Punjab	1405	1	1404	0.1%	99.9%
8	Rajasthan	132	1	131	0.8%	99.2%
9	Sikkim	32	8	24	25%	75%
10	Telangana	947	85	862	9%	91%
	<b>Grand Total</b>	<b>8868</b>	<b>314</b>	<b>8554</b>	<b>3.5%</b>	<b>96.5%</b>

**ANNEXURE -III****ANNEXURE-III, REFERRED TO IN REPLY TO PARTS (d) & (e) OF THE LOK SABHA UNSTARRED QUESTION NO. 1701 FOR ANSWERING ON 28.11.2019 ON “BIO-ENERGY POTENTIAL”**

**State/UT-wise and State Programme Implementing Agency-wise (including KVIC & NDDDB) Physical Targets allocated for setting up of small biogas plants under NNBOMP during the year 2019-20.**

Sl. No.	State/ UT	State / UT PIA	Target (Numbers of biogas plants)			Total Nos. of Biogas Plants
			General	S.C.	S.T.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Andhra Pradesh	NREDCAP	2500	500	1000	4000
2	Arunachal Pradesh	APEDA	100	-	100	200
3	Assam	FDA (S F)	4000	400	600	5000
4	Bihar	RDD	500	500	-	1000
5	Chhattisgarh	CREDA	3000	1000	1500	5500
6	Goa	Agri Deptt.	200	100	-	300
7	Gujarat	GAIC Ltd.	1000	600	1000	2600
8	Haryana	Agriculture Deptt.	1500	300	200	2000
		RDD	800	400	--	1200
9	Himachal Pradesh	RDD	200	100	100	400
10	J & K	RDD	200	100	100	400
11	Jharkhand	RDD	300	200	200	700
12	Karnataka	RDPRD	6000	700	300	7000
13	Kerala	Agriculture Deptt.	1000	100	--	1100
		RDD	800	400	200	1400
14	Madhya Pradesh	MPSAIDC	4000	800	1000	5800
15	Maharashtra	RDD	6500	1200	800	8500
16	Manipur	RDD	100	--	100	200
17	Meghalaya	MNREDA	100	--	400	500
18	Mizoram	DA & V	100	--	300	400
19	Nagaland	RDD	100	--	200	300
20	Odisha	OREDA	800	400	300	1500
21	Punjab	PEDA	4000	500	--	4500
22	Puducherry	RDD	200	--	--	200
23	Rajasthan	RDD	2500	400	400	3300
24	Sikkim	SREDA	100	--	200	300
25	Tamil Nadu	RDPRD	500	300	200	1000
26	Telangana	RDD	500	300	200	1000
27	Tripura	TREDA	100	200	200	500
28	Uttar Pradesh	UPNEDA	1000	500	--	1500
29	Uttarakhand	UREDA	400	100	--	500
		RDD	600	100	100	800
30	West Bengal	RDD	500	100	200	800
31	A & N Island	RDPRD	--	100	100	200
32	Dadar & Nagar H.	RDPRD	--	100	100	200
33	All States	KVIC	5000	1200	1000	7200
34	All States	NDDDB, Anand	3000	500	500	4000
		<b>Total</b>	<b>52200</b>	<b>12200</b>	<b>11600</b>	<b>76000</b>

