GOVERNMENT OF INDIA MINISTRY OF NEW AND RENEWABLE ENERGY

LOK SABHA

UNSTARRED QUESTION NO. 720

TO BE ANSWERED ON 28.04.2016

POTENTIAL OF ENERGY GENERATION FROM BIOMASS

720. SHRI RAVNEET SINGH:

SHRIMATI RAKSHATAI KHADSE:

Will the Minister of New and Renewable Energy be pleased to state:

- (a) whether the country possess huge potential of energy generation from biomass, if so, the details thereof;
- (b) whether the Government has undertaken any study to find out the same, if so, the details thereof;
- (c) the fund allocated by the Government for energy generation from biomass during each of the last three years, States-wise;
- (d) whether the Government proposes to establish rice husk biomass power generation plants by using gasifire were established in Bihar at the village levels, if so, the details thereof;
- (e) the present status of these power generation plants in the country; and
- (f) the steps being taken by the Government for promotion of gasifires to use widely as a non-conventional energy source?

ANSWER

THE MINISTER OF STATE FOR POWER, COAL & NEW AND RENEWABLE ENERGY (INDEPENDENT CHARGE) (SHRI PIYUSH GOYAL)

- (a)&(b): As per the National Biomass Resource Atlas prepared by Indian Institute of Science, Bangalore under a project sponsored by Ministry of New and Renewable Energy, the estimated power generation capacity from biomass is about 18,000 MW. In addition, a surplus power generation capacity of about 5000 MW through bagasse based cogeneration in sugar mills has been estimated in the country. The state-wise details of estimated power generation potential from agricultural residues and bagasse based cogeneration potential are given at **Annexure-I and II** respectively.
- (c): State-wise details of funds released under biomass power and baggase cogeneration programmes, during last three years are given at **Annexure-III**.
- (d)&(e): The Ministry of New and Renewable Energy (MNRE) is promoting generation of electricity from agro-residues including paddy husk through biomass gasifier system for meeting unmet demand of electricity in rural areas. Sixty rice husk based gasifier systems of 32 kW each are providing electricity in various villages in the state of Bihar.
- **(f):** The Ministry of New and Renewable Energy provides Central Finance Assistance (CFA) under biomass gasifier programme ranging from Rs. 2,500 to Rs.15,000 per kilowatt depending upon application.

Annexure-I referred to in reply to part (a) & (b) of the Lok Sabha Un-starred Question No. 720 for 28.04.2016 regarding "Potential of Energy Generation from Biomass"

State-wise details of estimated power potential from agricultural residues

S. No.	State	Estimated Power Potential from surplus agricultural residues (MW)
1	Andhra Pradesh	863.3
2	Arunachal Pradesh	9.2
3	Assam	283.9
4	Bihar	641.1
5	Chhattisgarh	248.5
6	Goa	20.9
7	Gujarat	1224.8
8	Haryana	1456.9
9	Himachal Pradesh	132.6
10	Jammu & Kashmir	37.1
11	Jharkhand	106.7
12	Karnataka	1195.7
13	Kerala	864.4
14	Madhya Pradesh	1373.3
15	Maharashtra	1983.7
16	Manipur	14.3
17	Meghalaya	11.3
18	Mizoram	1.12
19	Nagaland	10
20	Orissa	429.3
21	Punjab	3172.2
22	Rajasthan	1126.7
23	Sikkim	2.29
24	Tamil Nadu	1160
25	Tripura	2.94
26	Uttar Pradesh	1746.2
27	Uttarakhand	80.9
28	West Bengal	529.3
	Total	18728.7

(MW = Megawatt)

Annexure-II referred to in reply to part (a) & (b) of the Lok Sabha Un-starred Question No. 720 for 28.04.2016 regarding "Potential of Energy Generation from Biomass"

State-wise details of estimated bagasse co-generation potential

S.No.	States	Potential (MW)
1.	Maharashtra	1250
2.	Uttar Pradesh	1250
3.	Tamil Nadu	450
4.	Karnataka	450
5.	Andhra Pradesh	300
6.	Bihar	300
7.	Gujarat	350
8.	Punjab	300
9.	Haryana, Uttarakhand & others	350
	Total	5000

(MW = Megawatt)

Annexure-III referred to in reply to part (c) of the Lok Sabha Un-starred Question No. 720 for 28.04.2016 regarding "Potential of Energy Generation from Biomass"

Details of funds released under biomass power and baggase cogeneration programmes, state-wise during last three years

(Rupees in crore)

S.No.	States/UT	2015		2015-
3.NO.		2013-14	2014-15	16
1	Gujarat	0.89	0.00	0.00
2	Haryana	0.00	0.00	0.88
3	Karnataka	0.90	1.77	0.00
4	Madhya Pradesh	0.00	0.89	0.00
5	Maharashtra	27.80	17.12	21.91
6	Punjab	0.00	0.85	0.00
7	Rajasthan	0.00	2.26	0.48
8	Tamil Nadu	0.64	0.00	0.83
9	Uttar Pradesh	1.12	1.00	1.50
10	Chhattisgarh	0.00	0.00	2.15
11	Uttaranchal	0.00	1.12	0.00
12	Others	0.05	0.00	0.00
_	Total	31.38	25.00	27.74