

**GOVERNMENT OF INDIA
NON-CONVENTIONAL ENERGY SOURCES
LOK SABHA**

UNSTARRED QUESTION NO:1795
ANSWERED ON:08.03.2001
STATUS OF NCES AND RENEWABLE SOURCES
S. SAIDUZZAMAN

Will the Minister of NON-CONVENTIONAL ENERGY SOURCES be pleased to state:

- (a) the details of source of non-conventional energy including renewable sources which are in actual use in India including wind power etc.
- (b) the details of the potential of each of these indicating the present usage and the ultimate targets;
- (c) whether the Non-Conventional Energy Sources and renewable sources including Biomass is rather unhappy; and
- (d) if so, the steps taken and proposed to be taken in this regard?

Answer

MINISTER OF STATE FOR NON-CONVENTIONAL ENERGY SOURCES (INDEPENDENT CHARGE), (SHRI M. KANNAPPAN)

(a) & (b): India has a vast potential of non-conventional energy sources such as solar, wind, small hydro power and biomass. The various systems/devices have been developed for effective utilization of non-conventional energy sources for meeting energy needs of cooking, heating, lighting and electricity in the country. The details of estimated potential in the country and achievements made under various non-conventional energy programmes upto 31st December, 2000 are given in the Annexure.

(c) & (d) : No, Sir. The Ministry has installed a cumulative capacity of about 3000 MW by end of 31st December 2000 including about 300 MW from biomass and is giving priority for power generation from non-conventional energy sources, including biomass. In addition, the Ministry is encouraging promotion, development and utilisation of non-conventional energy sources, by providing various fiscal, financial and promotional incentives including financial support, soft term loans and conducive renewable energy power policies for wheeling, banking, buy-back and third party sale of renewable energy power.

Annexure

Annexure referred to in reply to part (a) & (b) of the Lok Sabha Unstarred Question No.1795 for 08.03.2001 regarding status of non-conventional energy sources.

The estimated potential and achievements made under various non-conventional energy sources upto December, 2000 in the country.

Sources/Systems	Potential	Approximate	Achievements
			(as on 31-12-2000)

- | | | | |
|----|----------------------------------|-----------------|------------------|
| 1. | Biogas plants (No.) | 120 lakh | 31.1 lakhs |
| 2. | Improved Chulha (No.) | 12 crores | 326.2 lakhs |
| 3. | a. Biomass Power | 19,500 MW | 273 MW |
| | b. Biomass Gasifier | 35.52 MW | |
| 4. | Solar Photovoltaic | 20 MW/sq. km. | |
| | i. Solar Street Lighting Systems | - | 40764 Nos. |
| | ii. Home Lighting Systems | - | 137212 Nos. |
| | iii Solar Lanterns | - | 319310 Nos. |
| | iv. SPV Power Plants | - | 1078.7 kWp |
| 5. | Solar Water Heating Systems | 30 million sq.m | 5,50,000 sq.mtr. |
| | collector area | collector area | |
| 6. | Solar Cookers | 4,91,212 | Nos. |
| 7. | Wind Power | 45,000 MW | 1269.4 MW |

- | | | | |
|-----|-----------------------------|-----------|-----------|
| 8. | Small Hydro Power | 15,000 MW | 1341.1 MW |
| | (upto 25 MW) | | |
| 9. | Wind Pumps | 670 Nos. | |
| 10. | Hybrid Systems | 91.5 kW | |
| 11. | Solar PV Pumps | 3575 Nos. | |
| 12. | Solar Photovoltaic Power | 1615 kW | |
| 13. | Energy Recovery from wastes | 1700 MW | 16.2 MW |
| 14. | Battery Operated Vehicles | 240 Nos. | |

MW = Mega-watt kW = Kilo watt Sq. km.= Square Kilometer
 Sq.m = Square meter kWp = Kilo watt peak