

Biomass for power generation

3275. SHRI RAJKUMAR DHOOT: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

(a) whether it is a fact that 70-75 per cent of Biomass resources in India are used as fodder, as fuel for domestic cooking and for other economic purposes, leaving 120- 150 million tonnes of usable agro-industrial and agricultural residues per year which would be used for power generation;

(b) if so, the details of power projects working and under implementation, based on usable agro-industrial and agricultural residues; and

(c) the steps proposed to be taken to increase the availability of Bio mass for power generation?

THE MINISTER OF NEW AND RENEWABLE ENERGY (DR. FAROOQ ABDULLAH): (a) Yes, Sir. As per National Biomass Resource Atlas prepared by Indian Institute of Science, Bangalore under a project sponsored by the Ministry the surplus agro industrial and agricultural residues in the country has been estimated to about 120-150 million MT per year for power generation which has a biomass power potential of about 18000 MW.

(b) A cumulative biomass power generation capacity of 1870 MW through 220 projects has already been installed and 2170 MW through 170 projects are under implementation as on 30.6.2009 in the States of Andhra Pradesh, Chhattisgarh, Gujarat, Haryana, Karnataka, Maharashtra, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal.

(c) The Government is providing various fiscal incentives for setting up of power generation projects from biomass throughout the country including capital subsidy linked with capacity and fiscal incentives such as concessional customs duty on import of machineries and components, excise duty exemption, accelerated depreciation on major components, relief from taxes and term loan from Indian Renewable Energy Development Agency (IREDA), and other financial institutions. This apart, preferential tariff is being provided for sale of power from commercial biomass power projects in 14 states. Promotional incentives are also provided for development of biomass power projects, capacity building, awareness creation etc.

Solar energy

3276. SHRI S. ANBALAGAN: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

(a) the progress made in respect of harnessing the solar energy, during each of the last three years;

(b) the amount allocated for the purpose and spent during each of the last three financial years;

(c) whether any research is being undertaken in the country to convert majority of the light falling on a solar cell into electricity; and

(d) if so, the results achieved so far?

THE MINISTER OF NEW AND RENEWABLE ENERGY (DR. FAROOQ ABDULLAH): (a) and (b) The progress made in respect of solar energy programmes of the Ministry and funds allocated and actual expenditure during the last three years are given in the Statement (*See below*).

(c) and (d) The Ministry is supporting research in all aspects of solar photovoltaic technology development, including improvement in efficiency of solar cells. The research efforts have led to the increase in solar cell efficiencies from 12-13 per cent to 14-16 percent, during the last few years.

Statement

Progress made funds allocated and expenditure incurred in Solar Energy Programmes during 2006-07, 2007-08 and 2008-09

(A)

Solar Energy Systems Installed	2006-07	2007-08	2008-09
Solar Home Lighting System (Nos.)	23,033	52,262	50,904
Lanterns (Nos.)	80,727	92,267	41,397
Street Lights (Nos.)	4,659	8,462	7,391
SPV Pumps (Nos.)	66	42	56
Solar Cookers (Nos.)	16,209	20,165	20,590
Solar Hot Water Systems (lakh Square metres)	4.00	4.5	5.60

(B)

(Rs. in crores)

	2006-07	2007-08	2008-09
Funds Allocated	87.25	130.00	119.00
Expenditure	75.81	77.85	82.45

Jatropha cultivation

3277. SHRI VIJAY JAWAHARLAL DARDA: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

(a) whether a detailed survey has been made about the availability of fallow and barren land which is not utilized for agriculture but can be utilized for growing Jatropha which is a raw material for bio fuel;