GOVERNMENT OF INDIA
NEW AND RENEWABLE ENERGY
LOK SABHA

UNSTARRED QUESTION NO:3816
ANSWERED ON:27.04.2012
RENEWABLE ENERGY SOURCES
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Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

(a) the details of schemes/ programmes for development of renewable energy sources in the country alongwith the power generated from these sources at present, State-wise;

(b) the details of funds/ financial assistance provided to various States for promotion of these sources during the last three years and the current year, source-wise and State-wise;

(c) whether the potential of power generation from these sources has been tapped properly in the country including the North-Eastern States.

(d) if so, the State-wise and source-wise details thereof and if not, the reasons therefore;

(e) whether the Government has identified hurdles in exploring the potential of these sources of energy; and

(f) if so, the details thereof alongwith the remedial measures taken by the Government in this regard?

Answer

THE MINISTER OF NEW AND RENEWABLE ENERGY (DR. FAROOQ ABDULLAH)

(a): The details of various schemes / programmes for development of renewable energy (RE) sources in the country are given in Annexure-I. State-wise details of the grid-interactive power generation capacity from different renewable energy sources, installed in the country as on 31.03.2012, are given in Annexure-II.

(b): Source-wise and State-wise details of funds/ financial assistance provided to various States for promotion of RE sources during the last three years and the current year (as on 23.4.2012) are given in Annexure-III.

(c): The potential for power generation from different RE sources has been tapped to varying extents in different States/ Regions, including the North-Eastern. It is highly region and resource specific and depends upon local conditions that vary widely. It also very much depends on the State level facilitations/ incentives which cannot be expected to be uniform.

(d): State-wise and resource-wise details of the estimated potential and reported achievements as on 31.03.2012 are given in Annexure-IV.

(e): Yes, Madam.

(f): Major constraints in rapid deployment of RE sources include:

their inherent intermittent nature leading to low plant load factor and problems in storing energy;
grid synchronization limitations on account of intermittent nature of supply;

current high cost, particularly of solar power generation;

delays at States level in land allotment/ statutory clearances for projects;

inadequate power evacuation/ transmission arrangements; and

general difficulties in servicing and maintenance in remote areas.

To overcome the difficulties faced in exploiting the available RE potential, the Government has taken several measures. These include the following:

Provision of Fiscal and financial incentives such as, capital/ interest subsidy/ generation based incentive, accelerated depreciation, nil/ concessional excise and customs duties; to improve projects viability.

Jawaharlal Nehru National Solar Mission to give a boost to deployment of solar energy systems, solar PV as well as solar thermal/ achieve reduction in cost of solar power.

Supporting R&D activities in different RE sectors in collaboration with industry for technological development, product improvement and cost reduction.

Holding periodic review meetings with States at appropriate levels to address any policy and regulatory issues and bottlenecks to expeditious completion of projects; ensuring timely development of transmission facilities for evacuation of power.

Human resource development in RE sector through fellowships, trainings, etc.

Annexure-I

Annexure-I referred to in reply to part (a) of the Lok Sabha Unstarred Question No. 3816 for 27.04.2012 regarding Renewable Energy Sources.

Details of the renewable energy schemes / programmes implemented in the country

1. GRID-INTERACTIVE/ OFF-GRID RENEWABLE POWER:

Wind Power : MW-scale Wind Farms/Aero generators/ Hybrid systems

Bio-power: Biomass power/ Cogeneration

Small Hydro Power : Small hydro power plants upto 25 MW capacity; Watermills/Micro hydel plants

Solar Power: Grid-interactive -Solar Thermal and SPV power generation plants, and off-grid/ decentralized systems for various applications under National Solar Mission.

2. RENEWABLE ENERGY FOR RURAL APPLICATIONS:

Remote Village Electrification Programme : provision of lighting/ electricity in the unelectrified remote villages/ hamlets

Biomass Gasifier for Rural Energy / Industrial Energy.

Biogas Programme: setting up of Family Type biogas plants for cooking/ lighting/ manure/ small scale power generation

Solar Thermal Systems: deployment of decentralized solar thermal systems/ devices (mainly solar cookers / driers for cooking, drying farm produce) under National Solar Mission.

3. RENEWABLE ENERGY FOR URBAN, INDUSTRIAL & COMMERCIAL APPLICATIONS:

Biomass(non-bagasse) cogeneration/ U&I Waste to Energy

Solar water heating systems - for domestic, institutional, commercial/ industrial applications under National Solar Mission.

Solar air heating/ steam generation systems - for community cooking/other applications in institutions and industry under National Solar Mission.

Green Buildings - incorporating active renewable energy systems and passive designs

Solar Cities − Planning for reducing their conventional energy consumption through energy conservation and use of renewable energy devices/ systems

4. RESEARCH, DESIGN & DEVELOPMENT:

Supporting research and development projects at premier institutions and industries on different aspects of new and renewable energy technologies.