GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA
UNSTARRED QUESTION NO. 2670
ANSWERED ON 07/08/2024

POWER GENERATION BY SOLAR AND RENEWABLE ENERGY SOURCES

2670. SHRI UJJWAL RAMAN SINGH

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

(a) whether the Government proposes to make renewable energy sources more important/effective in the global energy scenario by making India a solar energy producer during the year 2024-25;

(b) the percentage share of solar energy in India's power generation capacity at present;

(c) whether the Government proposes to organize any event to train/educate Indians living in rural, remote areas about solar energy and renewable energy sources; and

(d) whether the Government proposes to bring the power generation of solar energy and renewable energy sources to requisite sources to that level, at the places where the dams are being built on Ganga/Himalaya and are unable to meet the required electricity generation, so that the need to build dams on Ganga/Himalaya may not arise in future?

ANSWER
THE MINISTER OF STATE FOR NEW & RENEWABLE ENERGY AND POWER

(SHRI SHRIPAD YESSO NAIK)

(a) Government has issued various schemes for increasing solar energy production in India during the year 2024-25. The details of the schemes are given at **Annexure.**

(b)The total quantum of power generated from solar energy across the country during last financial year (2023-24) was 115.98 MU, which is about 6.67% of the total power generated (1738.56 BU) in the country.

(c) The Ministry of New and Renewable Energy (MNRE) is implementing skill development programmes to train youth of age above 18 years, on pan India basis, including rural areas, in various renewable energy areas, under short term training component of Human Resource Development programme. These include Suryamitra, Vayumitra, Jalurjamitra and Varunmitra programmes to train technicians for installation, operation and maintenance of solar energy, wind energy, small hydro power projects and solar water pumping systems respectively.

Ministry also provides fellowships to students of academic/R&D institutions to pursue higher education in the area of renewable energy at M.Tech., M.Sc., and Ph.D. levels and post-doctoral research under its National Renewable Energy Fellowship component of Human Resource Development programme. Internship opportunities to students pursuing higher studies are also provided by the ministry through Internship programme.

MNRE is implementing the Information and Public Awareness Programme in which various publicity activities such as workshops, seminars, webinars, exhibitions, placing of hoardings, panels and mobile van campaigns etc. are being carried out through its allied organizations such as SECI, IREDA, State Nodal Agencies and Central Bureau of Communication (CBC) to increase the public awareness about the benefits of renewable energy and the benefits/incentives given by the Government under various schemes/ programmes for promotion of renewable energy.

(d) Most renewable energy projects are set up by the private developers based on various considerations, including resource potential, adequate transmission and availability of suitable land. Land acquisition is undertaken by the respective project developers as required.

The Government of India has set a target of 500 GW non-fossil installed electricity capacity by 2030. As per Central Electricity Authority's report on Optimum Generation Mix 2030, the breakup of the estimated non-fossil fuel cumulative capacity for power generation by financial year 2029-30 is as follows:

Resource	Capacity (MW)
Hydro	53860
Small Hydro	5350
PSP	18986
Solar PV	292566
Wind	99895
Biomass	14500
Nuclear	15480

Renewable energy sources like Solar and Wind power generate intermittent and variant energy. As such, there is growing need for energy storage plants for smooth integration of these renewables with the grid. The development of Hydro Electric projects (HEPs) and Hydro Pumped Storage Projects (PSPs) are of paramount importance in reducing the intermittency caused by Solar and Wind power.

*****

ANNEXURE REFFERED TO IN REPLY TO PART (a) OF LOK SABHA UNSTARRED QUESTION NO.2670 FOR 07.08.2024

LIST OF VARIOUS SCHEMES FOR PROMOTION OF SOLAR ENERGY IN THE COUNTRY

1. Solar Park Scheme for setting up of at least 50 Solar Parks targeting 40,000 MW of solar power projects.
2. Scheme for setting up 12,000 MW of Grid-Connected Solar PV Power Projects by the Government producers with Viability Gap Funding (VGF).
3. Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM).
4. PM Surya Ghar: Muft Bijli Yojana to install one crore rooftop solar systems in the residential sector.
5. New Solar Power Scheme (for Particularly Vulnerable Tribal Groups (PVTG) Habitations/Villages) under the Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan (PM JANMAN).
6. Production-linked incentive scheme under “National Programme on high efficiency Solar PV Modules.”
7. Green Energy Corridor Scheme for Intra-State Transmission System.