

**GOVERNMENT OF INDIA
NEW AND RENEWABLE ENERGY
LOK SABHA**

UNSTARRED QUESTION NO:2425
ANSWERED ON:23.08.2013
RENEWABLE ENERGY POTENTIAL IN JHARKHAND
Ajay Kumar SHRI

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

- (a) whether renewable energy sources including solar are abundant in Jharkhand;
- (b) if so, the details thereof, source-wise;
- (c) whether renewable energy research and development (R&D) is one of the focus areas for the Government;
- (d) if so, whether the Government proposes to tap the vast potential available in various R&D organisations, educational institutions of national repute and high-end public and private sector technology companies located in Jharkhand;
- (e) if so, the details thereof; and
- (f) whether even low efficiency Thin Film Technology plants have performed well in the State and if so, the details thereof and the steps taken by the Government to fully utilise the solar potential of the State by promoting new and emerging solar technologies?

Answer

MINISTER FOR NEW AND RENEWABLE ENERGY (DR. FAROOQ ABDULLAH)

(a)&(b): The average solar energy availability in Jharkhand varies between 5.0 to 5.5 kWh/m²/day. The Ministry of New and Renewable Energy has taken up Solar Radiation Resource Assessment (SRRA) project to estimate the solar energy potential in the country, including Jharkhand. Under this project, the Centre for Wind Energy Technology (C-WET) will install two SRRA stations in Jharkhand to estimate the ground level solar radiation potential in the state. A potential of 91 MW from wind power, 209 MW from small hydro, 90 MW from biomass and 10 MW from waste to energy have been estimated in the State of Jharkhand. So far, grid interactive power generation capacity of 4.05 MW from small hydro and 16 MW from solar have been set up in the state. This apart, 7237 biogas plants, 500 kW biomass gasifiers, 1200 kW biomass (non-bagasse), 620 solar street lighting systems, 23374 solar lanterns, 480.90 kW solar power plants have been set up and 493 villages have been electrified in the state.

(c),(d),(e)&(f): Yes, Madam. Solar energy, bio-energy and hydrogen and fuel cells are the major areas of research, design, development and demonstration. A comprehensive policy and guidelines for research, design, development, demonstration and manufacture for new and renewable energy sector is in place. It has provisions to support R&D for technology development and demonstration through various academic and research institutions including autonomous bodies and industry. It emphasizes to strengthen Core R&D Groups/Centres so as to take up advanced research involving other institutions. Financial assistance for the projects that involve partnership with industry / civil society organizations is normally restricted to 50% of the project cost. However for a proposal from academic institutions, government/non-profit research organizations and NGOs, ministry may provide upto 100% funding. An R&D project on fuel cell is being implemented by Birla Institute of Technology, Ranchi, Jharkhand. The government encourages the use of efficient and advanced technologies for solar power generation.