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

**UNSTARRED QUESTION NO:712** ANSWERED ON:02.12.1999 DEVELOPMENT OF POWER FROM NON CONVENTIONAL ENERGY SOURCES **BRAJ MOHAN RAM** 

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

(a) Whether the Government have taken any step for generation and development of power from the non-conventional energy sources in Bihar

(b) If so, the details thereof; and

(c) The schemes formulated for development of non-conventional energy sources in the Ninth Five Year Plan?

# Answer

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

(a), (b) & (c): The Ministry of Non-Conventional Energy Sources has taken various steps for generation of power / energy through nonconventional energy sources such as Biogas Plants, Improved Chulhas, Biomass gasification and Briquetting plants, Solar Thermal Water Heating, both domestic and industrial, Solar Photovoltaic energy based rural home-lighting, lanterns, water pumping for irrigation and village level power plants, grid connected power from Wind Energy, Small Hydro, Biomass Combustion, Bagassebased Co-generation and Solar Photovoltaic Energy and energy from Urban & Industrial Wastes, throughout the country including the State of Bihar. A number of steps has been taken to promote the production and utilization of non-conventional energy sources which include fiscal, financial and promotional incentives provided by the Central Government under its various programmes for production of energy sources, announcement of conducive policies for wheeling, banking, buy-back, third party sale and sales tax benefits by the State Governments to attract private sector participation and soft loan from IREDA. Accordingly a wide range of schemes have been formulated for the production and development of non-conventional energy sources as indicated above during the Ninth Five Year Plan. A list of all schemes continued during Ninth Five Year Plan, are given at Annexure-I and in the State of Bihar are given at Annexure-II.

Annexure-I referred to in reply to parts (a), (b) & (c) of the Lok Sabha Unstarred QuestionNo.712 for 2.12.99 regarding Development of Power from Non-Conventional Energy Sources

List of Schemes/programmes of Non-Conventional Energy Sources continued during Ninth Five Year Plan

- a. National Programme on Biomass Power / Co-generation.
- Solar Photovoltaic Demonstration Programme. b.
- SPV Water Pumping System for agriculture and related uses. с.
- d. Solar Thermal Energy Programme.
- National Programme on Energy Recovery from urban, municipal and industrial wastes. e.
- f. Wind Power Programme
- g. Solar Power Programme
- Grid Interactive SPV Power Programme
- Solar Thermal Power Programme
- h. Programme for Water Pumping Wind Mills, Small Aero-generators and Hybrid Systems
- Small Hydro Projects Programme. i.
- j. National Programme on Biogas
- National Programme on Biogas Development
- Community/Institutional/Night soil based Biogas Plants
- k. National Programme on Improved Chulha
- Integrated Rural Energy Programmes. 1. m. Special Area Demonstration Project
- n. Animal Energy Programme
- New Technologies ο.
- Chemical Sources of Energy
- Hydrogen Energy
- Geothermal Energy
- Alternate Fuel for Surface Transport
- Ocean Energy (Tidal Energy).
- p. Information and Publicity q. International Cooperation
- Seminar, symposia, Workshops and Conferences r.
- s. Technology Information Forecasting Assessment & Data Bank (TIFAD)
- t. National Institute of Renewable Energy (NIRE)
- u. National Bio-energy Board (NBB)

- v. Indian Renewable Energy Development Agency Limited (IREDA)
- w. Setting up State Nodal Agencies in North-East and Sikkim

#### Annexure-II referred to in reply to part- (a), (b) & (c) of the Lok Sabha Unstarred QuestionNo.712 for 2.12.99 regarding Development of Power from Non-Conventional Energy Sources

List of Schemes/programmes of Non-Conventional Energy Sources being implemented in the State of Bihar.

- a. National Programme on Biomass Power / Co-generation.
- b. Solar Photovoltaic Demonstration Programme.c. SPV Water Pumping System for agriculture and related uses.
- d. Wind Pumps and Aerogenerators.
- e. Biomass Gasifier Demonstration Programme. f. Small Hydro Projects Programme.
- g. National Programme on Biogas Development and Community/Institutional/Night
- soil based Biogas Plants
- g. National Programme on Improved Chulha