

power panels and also lack of awareness about the subsidy and other facilities given by Government; and

(d) if so, how the Ministry is planning to go ahead in this regard?

THE MINISTER OF STATE OF THE MINISTRY OF NEW AND RENEWABLE ENERGY (SHRI PIYUSH GOYAL): (a) Yes, Sir .

(b) and (c) No, Sir. However, this is a new programme and some time is required for the programme to take off. Therefore achievements in initial years are not expected to be high.

(d) The following steps have been taken by the Government to create consumer awareness and encourage installation of grid connected solar roof top systems in the country:

- (i) Target set for installation of 40,000 MW by year 2022.
- (ii) 15% Government subsidy is being provided for non-commercial and non-industrial categories using domestic solar panels
- (iii) Concessional Customs Duty and Excise Duty Exemptions, Accelerated Depreciation and Tax holiday are available.
- (iv) Priority Sector Lending upto ₹ 10 lakhs for individual households.
- (v) Provision of bank loans as a part of home loan/ home improvement loan
- (vi) Loans for system aggregators from Indian Renewable Energy Development Agency Limited (IREDA) at concessional interest rate (9.9% to 10.75% per annum)
- (vii) Electricity Regulatory Commissions of 19 States/UTs have notified regulations for grid connectivity, net-metering/feed-in-tariff mechanism.

Ministry is regularly conducting awareness programmes such as training workshops, exhibitions etc. and is releasing advertisements to create awareness.

#### **Setting up of R & D Institutes**

1510. SHRI JESUDASU SEELAM: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

(a) whether Government has taken measures for setting up of focused, goal driven R & D institutes in the country to attain: technology leadership in photovoltaic and other renewable energy technologies and if so, the details thereof; and

(b) whether Government has started awareness programmes to build consumer awareness about technology, economics and its right usages?

THE MINISTER OF STATE OF THE MINISTRY OF NEW AND RENEWABLE ENERGY (SHRI PIYUSH GOYAL): (a) Yes, Sir. The Ministry of New and Renewable Energy has set up three research institutes for carrying out Research and Development (R and D), Testing and Demonstration for development and promotion of renewable energy technologies/systems in the field of solar energy, wind energy and bio-energy, respectively. The details of these institutes are as follows: National Institute of Solar Energy (NISE), Gwalpahari, Gurgaon, Haryana (Formerly Solar Energy Centre)

1. National Institute of Wind Energy (NIWE), Chennai, Tamil Nadu (Formerly Centre for Wind Energy Technology).

2. Sardar Swaran Singh National Institute of Renewable Energy (SSSNIRE), Kapurthala, Punjab.

The focus of NISE is research, testing and technology development in solar thermal and solar photovoltaic. In addition, Centres for Excellences in R & D/academic institutions have also been supported for focused research for solar photovoltaic technology development. The Ministers also been supporting research and development in different areas of renewable energy at various R & D/academic institutions including autonomous bodies and industries for technology development and demonstration.

(b) Yes Sir, The Ministry is implementing Information and Public Awareness Programme for creating mass awareness about renewable energy technologies/systems for widespread uses in the country. Under this programme, information on technological developments, promotional activities, benefits and usages are disseminated through various medias. The awareness is also created through seminars, workshops and trainings conducted by MNRE institutes.

#### **Investment in solar power generation**

1511. SHRI PAUL MANOJ PANDIAN: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

(a) whether it is a fact that with an investment of ₹ 6.0 lakh crore, Government is considering to generate 1,00,000 MW of power by 2022 through solar power and if so, the details thereof; and

(b) whether it is also a fact that the country is poised to become a solar power house and would become the biggest generator of solar power in the world and if so, the details thereof?