

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

UNSTARRED QUESTION NO:526

ANSWERED ON:22.02.2006

INCREASING USE OF SOLAR ENERGY

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

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- (a) whether the Government proposes to provide solar energy operated equipments to the farmers for operating their tubewells;
- (b) if so, the details alongwith the cost thereof;
- (c) the per Megawatt production cost of Solar Energy as on date in the country;
- (d) whether the essential plants and equipments for solar energy production are indigenous;
- (e) if so, the details thereof;
- (f) if not, the expenditure on import of plants and equipments;
- (g) the names of countries from where these are being imported; and
- (h) the steps being taken by the Government to increase the use of solar energy in the country?

Answer

MINISTER OF STATE OF THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES (INDEPENDENT CHARGE) (SHRI VILAS MUTTEMWAR)

(a) & (b): Government is implementing a scheme to provide subsidy for installation of solar photovoltaic (SPV) water pumping systems for irrigation and drinking water applications. Typically, a 1800 Wp PV array capacity SPV water pumping system, which cost about Rs.3.65 lakh, is being used for irrigation purposes. The Ministry is providing a subsidy of Rs.30 per watt of PV array capacity used, subject to a maximum of Rs.50,000 per system.

(c): Solar energy can be harnessed through two routes, namely solar photovoltaic and solar thermal, by direct conversion to electricity and heat energy respectively. Use of solar energy to generate electricity at mega-watt level has not been done in the country so far. Further, power generation from solar thermal energy is still in the experimental stages in the country. However, the estimated unit cost of generation of electricity from solar photovoltaic and solar thermal route is in the range of Rs. 12 -20 per kWh and Rs. 10 - 15 per kWh respectively.

(d), (e), (f) & (g): An industrial base has been created in the country to indigenously manufacture solar cell modules, which are the most essential items required for the production of solar photovoltaic systems/applications. Imports are also being made from different countries mainly USA, Japan, Europe, and Russia etc. to meet the domestic as well as export requirements. Since solar cell modules are covered under open general license, no data on imports is maintained by the Ministry.

(h): The Ministry has been implementing comprehensive programmes for the development and utilization of solar energy in the country. In addition, number of incentives like subsidy, soft loan, 80% accelerated depreciation, concessional duty on import of raw materials and certain products, Excise duty exemption on certain devices/systems etc. are being provided by the Government for the production and use of solar energy systems.