## Development of alternative fuel

1493. SHRI K. N. BALAGOPAL: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

- (a) whether the Ministry is supporting any major project to develop alternate fuel/power source than the fossil fuel; and
  - (b) if so, the details thereof?

THE MINISTER OF NEW AND RENEWABLE ENERGY (DR. FAROOQ ABDULLAH): (a) The Ministry of New and Renewable Energy is supporting Research and Development (R&D) in the areas of bio-fuels and hydrogen energy for developing alternatives to fossil fuels.

(b) A total of 20 R&D projects in the area of bio-fuels and 24 projects in the area of hydrogen energy, supported by the Ministry of New and Renewable Energy, are presently in progress at various research and academic institutions.

## Generation of wind power

1494. SHRI BAISHNAB PARIDA: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

- (a) whether India is fast moving in generation of wind power;
- (b) if so, the targets thereof during the current Five Year Plan;
- (c) the action plan to exploit this sector in the coastal regions which have vast potential of this power;
  - (d) whether India is also emerging as a key hub for wind turbines;
- (e) the annual wind turbine capacity of the country, *inter-alia* indicating its action plan to boost this capacity; and
  - (f) the status of export of such turbines from the country?

THE MINISTER OF NEW AND RENEWABLE ENERGY (DR. FAROOQ ABDULLAH): (a) Yes, Sir.

- (b) A target of 15000 MW has been set for the Twelfth Five Year Plan.
- (c) The Government is promoting wind power projects in the country

Unstarred Questions

including in the coastal regions through private sector investment by providing fiscal and promotional incentives such as concessional import duty on certain components of wind electric generators, excise duty exemption to manufacturers. 10 years tax holiday on income generated from wind power projects is also available. Loans for installing windmills are available from Indian Renewable Energy Development Agency (IREDA) and other Financial Institutions. Technical support including wind resource assessment is provided by the Centre for Wind Energy Technology (C-WET), Chennai. This apart, preferential tariff is being provided in potential states.

- (d) Yes, Sir. There are 18 manufacturers of wind turbines making about 45 models.
- (e) India has an annual wind turbine production capacity of around 4000 MW, which can be expanded upto 8000 MW, if market demands.
- India is exporting wind turbines to countries like, US, Australia, Brazil, China etc. and also to Europe. The total export figures of the year 2011-12 were around Rs. 600 crores.

## Domestic solar manufacturing units

1495. SHRI PRAKASH JAVADEKAR: Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

- (a) whether a large number of domestic solar manufacturing units have been closed or filed for debt restructuring as flooding of imports of solar equipments have made them unviable;
- (b) whether the National Solar Mission has failed to encourage domestic manufacturing;
- (c) whether Government has taken any steps to protect domestic solar manufacturing and also the interests of consumers;
  - (d) if so, the details thereof; and
  - if not, the reasons therefor?

THE MINISTER OF NEW AND RENEWABLE ENERGY (DR. FAROOQ ABDULLAH): (a) Following the launch of the Jawaharlal Nehru National Solar Mission, (JNNSM) in 2010 the domestic manufacturing capacity of SPV cells and