

[English]

Working of Solar Chilling Plants and Wind Mills

*204. SHRI HARISH NARAYAN PRABHU ZANTYE: Will the PRIME MINISTER be pleased to state :

(a) the working statues of imported chilling plants, fridges and wind mills installed in each State/ Union Territory as per the latest review;

(b) the number of solar chilling plants solar fridges and wind mills proposed to be installed during the Eighth Five Year Plan, State/Union Territory-wise;

(c) the allocation likely to be made of the purpose, state-wise;

(d) the steps taken to implement this programme effectively; and

(e) the programme chakjed out to encourage indigenous^a production of these equipments?

THE MINISTER OF STATE IN THE MINISTRY OF NON CONVENTIONAL ENERGY SOURCES OF STATE IN THE MINISTRY OF AGRICULTUREE (SHRI S. KRISHNA KUMAR): (a) So far as solar Refrigeration Systems are concerned, a few units were installed through international agencies for purposes of Research & Development and evaluation. No regular programme involving imported refrigeration systems was taken up.

A total Wind Power capacity of about 45.35 MW has been established in the country so far, including private sector projects. In addition, 12.7 MW demonstration projects are currently under implementation and a number of projects are under implementation and a number of projects

are under implementation/planned in private sector. The wind electric generators commissioned so far are largely imported from Denmark including six numbers of 90 MW and 100 numbers of 200 KW Wind Electric Generators supplied under the Indo-Danish co-operation in the area of Non-Conventional Energy Sources. Some of the wind electric generators installed in the country contain indigenous components like towers, generators etc. The statewise break-up of total wind power capacity installed so far is given in the attached Statement.

The wind electric generators installed in Orissa, Kamataka, Goa and Dahanu in Maharashtra are presently not in operation due to actions pending on the part of the concerned agencies in respective States. The wind electric generators installed in other States are, generally working satisfactorily and have generated 178 million units of electricity and fed to the respective state grids, upto December, 1992.

(b) and (c). During the Eighth Five Year Plan it is proposed to take up installation of 100 MW aggregated capacity wind power projects including in the private sector. An outlay of Rs.90 crores has been kept in Eighth Five Year Plan under Central Sector for wind energy programme. Assistance from International agencies is also available. Statewise Physical Targets are fixed on year to year basis, depending on wind potential, technical feasibility, availability of funds and receipt of viable project proposals from various States and private entrepreneurs.

No target has been fixed for solar refrigeration during the Eight Five Year Plan.

(d) The Government is encouraging power generation from wind through a mix of policy measures and fiscal incentives. Guidelines have been issued by some States to facility generation of power with involve-

ment of private sector and feeding it into the existing grids and for wheeling and banking of power. Efforts are being made to institute similar arrangements in other States and to ensure a remunerative price for the power produced. The fiscal incentives available include loans at concessional rates of interest through Indian Renewable Energy Development Agency; relief in Sales Tax and concessional rate of customs duty on materials and equipment. Additional financial resources are being mobilised through Work Bank and bilateral assistance.

(e) Some indigenous development and testing work has been undertaken during the last few years in the area of solar refrigeration. Indigenously assembled solar photovoltaic refrigeration systems for storing vaccines and machines are now being

offered by some Indian Companies. Efforts are also being made to develop indigenous technology for small refrigerators based on solar thermal route through research and development projects, supported by the Ministry of Non-Conventional Energy Sources.

For indigenous manufacture of wind electric generators in the country, two private sector companies have set up ventures with foreign collaborations. Some more companies are making efforts to set up such ventures. M/s Bharat heavy Electricals Ltd. has already undertaken indigenous production of wind electric generators. In addition, Ministry of Non-Conventional Energy Sources has taken up a major initiative for indigenous development of Rotor Blades for 200-250 KW class wind electric generators research and development organisations.

STATEMENT

Statewise Breakup of Total Wind Power Capacity

<i>Sl.No.</i>	<i>Name of State</i>	<i>Aggregated Capacity (MW)</i>	
		<i>Installed</i>	<i>Under Implementation</i>
1.	Tamil Nadu	24.88	2.0
2.	Gujarat	16.19	2.7
3.	Maharashtra	1.19	1.5
4.	Andhra Pradesh	0.55	2.5
5.	Orissa	1.19	—
6.	Karnataka	0.55	2.0
7.	Madhya Pradesh	0.59	—
8.	Goa	0.11	—
9.	Kerala	0.10	2.0
Total		45.35	12.7

*Including 7.52 MW installed under private sector.