

and in refrigeration and are keeping in close touch with the developments abroad in this field.

(b) A number of research and development schemes have been taken up under the auspices of the Deptt. of Science & Technology for the development of solar energy devices and generally for increasing the technological capability of the country in this regard. A statement giving the progress of the important R&D projects for utilisation of solar energy is laid on the Table of the House.

Statement

Utilisation of solar energy for a wide range of applications with special emphasis on its use in rural areas has been given high priority by the Government. Efforts in this area are still in the R&D stage. Organised research and development with significant financial inputs by the Department of Science & Technology started only a couple of years ago and normally new technologies take several years before they could reach commercialisation. Sustained efforts have led to successful proto-type development of certain solar energy devices such as water heating systems, solar driers for agricultural produce, solar power plant etc. Some of these devices are undergoing field trials in different parts of the country. The following are the more important R&D projects which have made significant progress :—

(i) Successful completion of one-tonne per day prototype paddy dryer by the Annamalai University.

(ii) A 10-tonne per day paddy dryer has been installed by the National Industrial Development Corporation at the Central State Farm in Lathowal near Ludhiana—Work started on another solar dryer installation at Gauhati (Assam).

(iii) A 10-KW experimental solar power plant has been successfully installed and commissioned by the Bharat Heavy Electricals Limited in cooperation with the Indian Institute of Technology, Madras under the Indo-FRG Cooperation Agreement.

(iv) Solar Energy heating system for domestic use and for medium and large scale applications in hotels, guest houses, hostels etc. have also been developed by the Bharat Heavy Electricals Limited and the National Physical Laboratory. One such large scale installation has been successfully installed at the Qutab Hotel, Delhi.

(v) Know-how has been developed for making fresnel condensors for solar cells at the Indian Institute of Science, Bangalore.

(vi) R&D work for fabrication of silicon solar cells at the Central Electronics Ltd. for direct conversion of solar energy into electricity by photovoltaic process is in progress. A number of other institutions in the country are participating in this work. The main thrust of R&D work in this area is to develop low cost solar photovoltaic cells with reasonable efficiency.

(vii) A solar energised desalination pilot plant of 1000 litres per day capacity for obtaining potable water from sea water was developed by the Central Salt & Marine Chemical Research Institute, Bhavanagr. Based on the performance of this pilot plant, the Institute has recently commissioned a 5000 litres per day capacity plant at village Awania in Gujarat and plants of larger capacities are under construction in Rajasthan.

(viii) The feasibility of transistor radio being operated directly by solar photovoltaic cells is being studied at Central Electronics Limited.

(ix) Research and development is also in progress for solar powered cold storage for agricultural products at the Indian Institute of Technology, Bombay.

गोवा को राज्य का दर्जा देना

253. श्री राम लाल राही : क्या गृह मंत्री यह बताने की कृपा करेंगे कि:

(क) क्या सरकार का विचार निकट भविष्य में गोवा को राज्य का दर्जा देने का है ; और

(ख) यदि हाँ, तो कब तक ?

गृह मंत्रालय में राज्य मंत्री (श्री बनिफ लाल मण्डल) : (क) और (ख). सरकार इस प्रश्न पर विचार करने के लिये इस समय को उपयुक्त नहीं समझती है ।