

- (3) In order to curb the consumption of petrol and diesel during 1990-91, the following steps are being taken:
- (i) Controlling the use of transport.
 - (ii) Pooling of MT vehicles for use.
 - (iii) Proper maintenance of vehicles.
 - (iv) Effective training of drivers to ensure economy.
 - (v) Progressive introduction of more fuel efficient vehicles like Maruti, Alwyn Nissan, Swaraj Mazda etc., to the extent feasible.

Desalination of Sea Water

*572. SHRI ERA ANBARASU:
SHRI MANORANJAN
BHAKTA:

Will the PRIME MINISTER be pleased to state:

(a) whether the present method of desalination of sea-water to make it potable has been found costly;

(b) if so, whether Government are contemplating any new method to cut down the costs; and

(c) if so, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF STATE IN DEPARTMENT OF EDUCATION IN THE MINISTRY OF HUMAN RESOURCE DEVELOPMENT (PROF. M.G.K. MENON): (a) Central Salt and Marine Chemicals Research Institute (CSMCRI), Bhavnagar has developed two-stage electro dialysis-based method of desalination of sea-water to make it potable. The present cost of desalination,

based on the CSMCRI technology, works out to 10 paise per litre for a plant capacity of 5 cubic meters per day. The international cost of desalinating sea-water comes to between 2-3 paise per litre for large scale plants of capacity ranging between 4500M3 to 23,000 M3.

(b) and (c).

(1) Experimental efforts are on in CSMCRI to reduce the cost, by bringing down the electrical energy cost by nearly 30%, by developing and introducing conducting spacers in electro dialysis process.

(2) Efforts are also directed to develop alternative routes based on reverse osmosis technology for bringing down the cost of desalination of sea water.

Activities of Space Applications Centre at Ahmedabad

*573. SHRI M.M. PALLAM RAJU: Will the PRIME MINISTER be pleased to state:

(a) the exact nature of activities of the Space Applications Centre (SAC) at Ahmedabad and its various co-ordinating agencies;

(b) the names of important organisations to which information generated by the SAC is supplied;

(c) whether information generated by the SAC is sold commercially, especially to international data banks; and if not, whether the organisation proposes to do it; and

(d) the future activities being contemplated by the SAC?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOL-

OGY AND MINISTER OF STATE IN DEPARTMENT OF EDUCATION IN THE MINISTRY OF HUMAN RESOURCE DEVELOPMENT (PROF. M.G.K. MENON): (a) The major activities carried out in the Space Applications Centre (SAC), Ahmedabad are conceptualisation, research and development and execution of projects in the field of Space Applications, namely, Satellite Communications, Remote Sensing and Meteorology. SAC is primarily responsible for the development of payloads for all Indian remote sensing and communication satellites. SAC is also responsible for the planning and execution of certain identified applications projects and for the design and development of necessary hardware and software in such projects. SAC interacts with all the other Indian Space Research Organisation (ISRO) Centres/Units, including National Remote Sensing Agency (NRSA) at Hyderabad and other user agencies at the Centre and State level.

(b) The information on remote sensing generated by SAC is supplied to NRSA, Hyderabad, ISRO Centres/Units and User Agencies and also Central Ministries and Departments and various States/Union Territories who use remote sensing data for their various application projects.

The technology developed in SAC, Ahmedabad is being transferred to industries in the public and private sectors under the Technology Transfer Programme of ISRO. For example, in the area of satellite telecommunications, SAC undertakes applications technology development and demonstration projects. In these areas, it coordinates with the user organisations such as Department of Telecommunications Ministry of Information and Broadcasting, India Meteorology Department, etc., right from the conceptualisation phase. The technologies thus developed have been offered to M/s Electronics Corporation of India Limited (ECIL) (for Satellite-based Disaster Warning

Receiver System) and M/s Kerala State Electronics Development Corporation Limited (KELTRON) (for Satellite-based Radio Networking Terminal), as technology transfer, to meet the larger requirements of the user agencies.

(c) There is no proposal at present for SAC to directly sell any data commercially, especially to International Data Banks.

(d) The activities mentioned in Part (a) will continue to be sustained and expanded where necessary to meet the ongoing and future-satellite programmes especially in the areas of remote sensing and communications.

Protocol for Cooperation in Sports with GDR

5963. SHRI KAILASH MEGHWAL: Will the PRIME MINISTER be pleased to state:

(a) whether the Protocol for cooperation in the field of sports with German Democratic Republic (GDR) has expired;

(b) if so, when;

(c) whether Government are negotiating for the next Protocol with the German Democratic Republic; and

(d) if so, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTER OF STATE IN DEPARTMENT OF EDUCATION IN THE MINISTRY OF HUMAN RESOURCE DEVELOPMENT (PROF. M.G.K. MENON): (a) Yes, Sir.

(b) On 31.12.1989.

(c) Yes, Sir.