

- (8) Gandhi Hindi Vidyapith, Prayag, Allahabad (UP).
- (9) National University of Electro Complex Homeopathy, Kanpur (UP).
- (10) University Newjerusalem, Kuthuparamba, Cannore (Kerala).
- (11) World Social Work University, Perunguzhi, Kerala.
- (12) Netaji Subhash Chandra Bose University (Open University) Achal-tal, Aligarh (UP).
- (13) Shrimati Mahadevi Verma Open University, Mughal Sarai (UP).
- (14) D.D.B. Sanskriti University, Puthur, Trichi, (Tamil Nadu).

[English]

#### **Gama Radiation Sterilisation Unit**

\*569. SHRI N.J. RATHVA:  
SHRI PRAKASH KOKO  
BRAHMBHATT:

Will the PRIME MINISTER be pleased to state:

(a) whether a unit for Gama radiation sterilisation of medical products is proposed to be set up in Gujarat; if so, the details thereof;

(b) whether Bhabha Atomic Energy Research Centre has agreed to provide technical know-how for setting up this plant; and

(c) if so, the what extent it will be beneficial and useful for the country?

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. A proposal for setting up a Radiation Sterilization Plant for medical products in Gujarat is under consideration by two parties viz. M/s Gujatratt Industrial Investment Corporation Ltd. and M/s Duphar-Interfran Ltd.

(b) Yes, Sir. Board of Radiation and Isotope Technology of the Department of Atomic Energy will provide technical assistance.

(c) The proposed Radiation Sterilisation Plant at Gujarat will be used for sterilising medical products and devices produced in Gujarat and in the Western region.

#### **Petrol and Diesel Consumption in Armed Forces Headquarters**

\*570. SHRI MADAN LAL KHURANA:  
Will the PRIME MINISTER be pleased to state:

(a) whether any survey has been undertaken to bring out the break-up of petrol and diesel consumption in Armed Forces Headquarters, New Delhi during 1989-90;

(b) if so, the details thereof, service-wise and how does this compare with that of the last three years; and

(c) the steps taken to bring down the consumption of petrol and diesel during 1990-91?

THE MINISTER OF STATE IN THE MINISTRY OF DEFENCE (DR. RAJA RAMANNA): (a) to (c). No survey has been undertaken with the specific object of bringing out the break-up of petrol and diesel

consumption by the Armed Forces Headquarters, New Delhi, during 1989-90. However, periodical returns reflecting the consumption of these items are being obtained by the Services Headquarters from lower

formations.

- (2) Details of consumption of petrol and diesel in the three Services Headquarters are as under:

<i>Service H. Qrs.</i>	<i>Consumption (in Kilo-litres)</i>								
	<i>Petrol</i>					<i>Diesel</i>			
	<i>1986-87</i>	<i>87-88</i>	<i>88-89</i>	<i>89-90</i>	<i>1986-87</i>	<i>87-88</i>	<i>88-89</i>	<i>89-90</i>	
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	
<b>Army</b>	427.17	422.25	401.23	398.40	114.88	122.28	115.45	109.15	
<b>Air Force</b>	328.90	389.70	392.05	413.10	250.76	296.59	320.21	346.05	
<b>Navy</b>	191.86	218.40	219.58	202.98	112.84	146.34	157.76	226.08	
<b>Total:</b>	<b>947.93</b>	<b>1030.35</b>	<b>1012.86</b>	<b>1014.48</b>	<b>478.48</b>	<b>565.21</b>	<b>593.42</b>	<b>681.28</b>	

- (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-