

25 वर्ष पूर्व सेवा-निवृत्त हुए और इस समय सेवा-निवृत्त हुए सैनिक कामियों की पेंशनों के बीच अन्तर

3614. श्री वृद्धि चन्द्र जैन : क्या रक्षा मंत्री यह बताने की कृपा करेंगे कि :

(क) क्या 25 वर्ष पूर्व सेवा-निवृत्त हुए और इस समय सेवा निवृत्त हुए एक ही पद के सैनिक कामियों की पेंशनों के बीच कोई अन्तर है ;

(ख) यदि हां, तो इसके क्या कारण हैं; और

(ग) क्या सरकार का विचार इस तथ्य को ध्यान में रखते हुए पहले सेवा निवृत्त हुए भूतपूर्व सैनिकों की पेंशन में वृद्धि करने का है, कि बढ़ते हुए मूल्यों का प्रभाव पहले सेवा-निवृत्त हुए भूतपूर्व सैनिकों तथा हाल ही में सेवा-निवृत्त हुए सैनिकों पर समान रूप में पड़ा है और यदि हां, तो ऐसा कब तक किया जायेगा ?

रक्षा मंत्रालय में राज्य मंत्री (श्री सी० पी० एन० सिंह) (क) और (ख) . सेवा निवृत्त होने वाले सैनिकों कामियों की पेंशन की दरें अन्य बातों के साथ-साथ उनके वेतन पर आधारित होती हैं और इस तरह जब कभी वेतन मानों में वृद्धि होती है तो पेंशन की दरों में भी समुचित वृद्धि की जाती है । लेकिन पेंशन की नई दरें पिछली तारीख से लागू करने की सामान्यतः नीति नहीं है । वर्तमान वेतनमान 25 वर्ष पुराने वेतनमानों से अधिक है और इसलिए वर्तमान पेंशन दरें भी अधिक हैं ।

(ग) पहले सेवा निवृत्त हुए भूतपूर्व सैनिकों की पेंशन की दरों में वृद्धि करने का कोई मामला सरकार के विचाराधीन नहीं है । तथापि मूल्य वृद्धि के कारण बढ़ते हुए निर्वाह-खर्च की प्रतिपूर्ति करने के लिए उन्हें समय-समय पर तदर्थ वृद्धि, पेंशन पर तदर्थ व आवधिक राहत मंजूरी की जाती है ।

### Setting up of Solar Research Centres

3615. SHRI NAVIN RAVANI: Will the PRIME MINISTER be pleased to state:

(a) how many solar research centres are working at present and where; and

(b) whether there is any proposal to set up more centres and whether any study to set up one of such centres at Bhavnagar in Gujarat has been undertaken in view of its immense resources?

THE MINISTER OF STATE IN THE MINISTRY OF DEFENCE (SHRI C. P. N. SINGH): (a) A number of existing institutions in the country are already engaged on R&D work in the field of solar energy, the prominent ones being, Institutes of Technology, Indian Institute of Science, Bangalore, CSIR Laboratories, Laboratories of the Defence Research and Development Organization, several Universities, R & D Division of BHEL, Central Electronics Ltd., Tata Energy Research Institute, Pondicherry, Jyothi Ltd., Baroda, Punjab Agricultural University, Ludhiana, Central Arid Zone Research Institute, Jodhpur and other institutions. A list of institutions where Department of Science and Technology has funded research and development projects in this area is attached.

(b) The Department of Science and Technology has formulated a coordinated national R & D programme on solar energy by availing of expertise and infrastructure in the existing institutions (including the Central Salt and Marine Chemicals Research Institute of CSIR at Bhavnagar) in the country; no specific study for setting up additional centres including at Bhavnagar has been undertaken.

## Statement

## List of on-going projects

| Sl. No.                | Title   | Institution  |
|------------------------|---|--|
| 1                      | 2   | 3  |
| <b>1. Solar Energy</b> |   |  |
| 1.                     | Solar Energy Collector Units. . . . .   | PAU, Ludhiana  |
| 2.                     | Low Cost Solar Cells (Phase II) . . . . .   | GEL, Sahibabad   |
| 3.                     | Solar Water Heating Projects . . . . .  | BHEL   |
| 4.                     | Solar Water Pump (Turbine) . . . . .  | BHEL   |
| 5.                     | Solar Grain Dryers . . . . .  | NDIC, New Delhi.   |
| 6.                     | MOS Silicon Solar Cells (Phase II) . . . . .  | IIT, Kanpur.   |
| 7.                     | Flat Plate Collectors . . . . .   | BHEL<br>NPL, New Delhi                                   |
| 8.                     | 10 KW Electric Power Generation Demonstration Unit. . .   | BHEL   |
| 9.                     | Extraction & Purification of Solar grade silicon from rice husk for solar cells.                                      | IIT, Kharagpur.  |
| 10.                    | Solar Collector Coatings . . . . .  | IISc., Bangalore.  |
| 11.                    | Thin film Solar Cells (Phase II) . . . . .  | IIT, New Delhi.  |
| 12.                    | New Types of solar photovoltaic converters & thermal devices.   | Indian Association for Cultivation of Science, Calcutta. |
| 13.                    | Design & Development of Solar Energy Exhaust and Steam Powered Veneer dryer for Plywood factories.                    | Indian Plywood Ind. Research Institute, Bangalore.       |
| 14.                    | Polycrystalline silicon for photovoltaic solar energy conversion.   | NPL, New Delhi.  |
| 15.                    | Development of Small Turbine Prime Mover for a low temperature Rankine Cycle using Solar Energy.                      | IIT, Bombay.   |
| 16.                    | Solar Boosted Heat Pump Systems . . . . .   | IIT, Madras.   |
| 17.                    | Design Development & fabrication of Fresnel Masters. . .  | I.I.Sc., Bangalore.                                      |
| 18.                    | 7.5 KW Omnium-G Thermal Power Plant. . . . .  | BHEL   |
| 19.                    | Selective Coatings for Photo-thermal conversion . . . . .   | IIT, New Delhi<br>BHEL                                   |
| 20.                    | Solar Energy Heating Devices in Silk filatures . . . . .  | Karnataka State Council for S & T.                       |
| 21.                    | Setting up of a demonstration-cum-experimental solar energy water heating system at the Poona Dist. Leprosy Hospital. | BHEL   |
| 22.                    | Development of Solar Water Pump for rural application in collaboration with Dornier Systems (FRG).                    | BHEL   |
| 23.                    | Low Cost Solar Grade Silicon . . . . .  | IIT, Madras.   |

- | 1   | 2  | 3   |
|-----|--|---|
| 24. | Farm level solar-cum-husk fired grain driers . . .   | IIT, Kharagpur.                           |
| 25. | 1 KW Free Piston Stirling Engine System (1st Phase) . . .  | IIT, Bombay.                              |
| 26. | Conversion of the existing industrial roofing into solar air heaters for drying operations                         | Annamalai University Annamalai Nagar.     |
| 27. | Solar Energy system for tobacco curing, process. . . .   | Nagarjunare. University IISc., Bangalore. |
| 28. | Design and development of an advanced Flat plate collector.  | IIT, Delhi.                               |
| 29. | Preparation and Publication of solar radiation data hand book for solar energy users in India.                     | IITM, Poona RRI, Bangalore.               |
| 30. | Evaluation of CZ, FZ and Bridgman techniques for upgrading rice-husk silicon.                                      | IIT, Kharagpur.                           |
| 31. | Photovoltaic solar electric power system for rural development.  | Kalyani University Kalyani.               |
| 32. | Development of solar panels using high efficiency solar cells with optically concentrated sunlight.                | CEERI, Pilani.                            |
| 33. | Development of Thermal Storage system suitable for Thermoelectric and total energy system.                         | BHEL Corporated R & D Hyderabad.          |
| 34. | Test facilities for solar collectors and solar cells . . . .   | NPL, New Delhi.                           |
| 35. | Development of an integrated energy system for dairies in rural India— conceptual designs and feasibility studies. | IIT, Madras.                              |
| 36. | Development of selective surfaces for efficient solar thermal applications.  | Andhra University Waltair.                |
| 37. | Cold Storage Unit using absorption refrigeration and solar energy.   | IIT, Bombay.                              |

**BIO MASS**

- |    |   |   |
|----|---|---|
| 1. | All India Coordinated Project on Biogas Technology and utilization (Phase II).  | KVIC, Bombay<br>PRAD, Lucknow<br>SERC, Roorkee<br>CBRI, Roorkee |
| 2. | Biogas from Water Hyacinth . . . . .  | NS Engg. College, Hyderabad                                     |
| 3. | Microbiology & other aspects of Gobar Gas Plant & its utilization.  | MACS, Pune.   |
| 4. | Kachra Gas Plant for Biogas Production . . . . .  | PAU, Ludhiana.  |
| 5. | Utilization of Sludge Gas for operation of Gas Turbine Engines.   | NAL, Bangalore  |
| 6. | Introduction, screening and cultivation of potential petrocrops and their conversion to Petroleum.                      | IIP, Dehradun<br>NBRI, Lucknow                                  |
| 7. | Microbial production of<br>(i) Methanol from methane<br>(ii) Bioconversion of Cellulosic/starchy residues into ethanol. | IIT, New Delhi<br>IIT, New Delhi                                |

1 2 3

8. Conversion of Water Hyacinth into products useful for agricultural communities etc. Calcutta University, Calcutta

3. *Hydrogen Energy*

1. Development of solid materials for production & storage of hydrogen IIT, Madras

2. Inter-temporal Mathematical Programming Model of National Economy IIT, New Delhi

3. A Hydrogen Energy System Technology study for India IIT, Madras

4. *Wind Energy*

1. Vertical Axis Wind Generator . . . . . BHEL, Delhi  
IIT, Madras

2. Design and Development of cost-effective water pumping wind mills NAL Bangalore

3. Development of a new type of windmill . . . . . IIS, Bangalore

4. Design and Development of a small output multiblade type wind mill for pumping water for agricultural purposes. IIT, Bombay

5. *Geothermal Energy*

1. Cold storage Plan at Manikaran, H.P. Utilizing geothermal energy GSI, Lucknow  
IIT, New Delhi

6. *Electro-chemical storage*

1. R&D of Ni-Fe & Metal Air Batteries . . . . . IIS, Bangalore

7. *Battery powered commercial vehicle*

1. Battery Powered Commercial Vehicle . . . . . VRDE, Ahmednagar  
RDSO, Lucknow

CECRI, Karaikudi

BHEL, Bhopal

LIST OF COMPLETED PROJECTS

| Sl. No.                | Title   | Institution                             |
|------------------------|---|---|
| 1                      | 2   | 3                                       |
| <b>I. Solar Energy</b> |   |   |
| 1.                     | One ton per day solar paddy Drier . . . . .   | Annamalai University<br>Annamalai Nagar |
| 2.                     | 3 ton Solar Air-conditioner . . . . .         | IIT, Madras                             |
| 3.                     | Solar Collector & Pump . . . . .              | BITS, Pilani                            |
| 4.                     | Solar Pre-heater for drying of milk . . . . . | AMUL, Anand                             |
| 5.                     | Solar Kilns for timber drying . . . . .       | FRIC, Dehradun                          |
| 6.                     | Low Cost Solar Cells (Phase I) . . . . .      | CEL                                     |
|                        |   | BITS, Pilani                            |
|                        |   | ECIL Hyderabad                          |

1

2

3

|                     |  |  |
|---------------------|--|--|
|                     |  | CEERI, Pilani  |
|                     |  | IIT, New Delhi   |
| 7.                  | Fresnel Condensors (Lenses)  | I.I. Sc.<br>Bangalore  |
| 8.                  | MOS Silicon Solar Cells  | IIT, Kanpur  |
| 9.                  | Photogalvanic Cells  | IIT, Madras  |
| 10.                 | Thermal & Hydraulics design of Flat Plate Collectors                         | IIT, Kanpur  |
| <br>                |  |  |
| II. <i>BIO MASS</i> |  |  |
| 1.                  | All India Coordinated Project on Biogas Technology and Utilization (Phase-I) | KVIC, Bombay<br>NEERI, Nagpur<br><br>IARI, New Delhi<br><br>IIM, Ahmedabad<br><br>SERC, Roorkee<br><br>PRAD, Lucknow<br><br>University of Lucknow<br><br>NSI, Kanpur |

**Midnapur as Industrially Backward District**

3616. SHRIMATI GEETA MUKHERJEE: Will the Minister of INDUSTRY be pleased to state:

(a) whether Government are aware that Midnapur district of West Bengal is one of the industrially backward districts;

(b) if so, whether Government are considering establishment of new industries in public sector in this district; and

(c) if so, the details thereof?

**THE MINISTER OF STATE IN THE MINISTRY OF INDUSTRY**

(SHRI CHARANJIT CHANANA): (a) Yes Madam.

(b) and (c). M/s. Hindustan Fertilizer Corporation are setting up a fertilizer and chemical Plant at Haldia which would manufacture Urea, NPK, Methanol and Soda Ash.

The Government of West Bengal have also a proposal to set up a petrochemical complex at Haldia. West Bengal State Industrial Development Corporation is also setting up a Maleic Anhydride plant at Kharagpur in Midnapur district on joint sector basis. In addition to the above, one Letter of Intent was issued during 1979 to M/s. West Bengal Industrial Development Corporation Ltd., Calcutta for location of their unit in Midnapur District for the manufacture of Slurry explosives.