

[English]

Tropical Global Climate

2987. PROF. M. KAMSON : Will the PRIME MINISTER be pleased to state :

(a) whether Indian Scientists have launched some international collaborative long-term programme to understand the influence of tropical oceans on global climate;

(b) if so, the details thereof; and

(c) its impact on the development of country?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE AND MINISTER OF STATE IN THE DEPARTMENT OF ATOMIC ENERGY AND DEPARTMENT OF SPACE AND MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI BHUVNESH CHATURVEDI) : (a) Yes, Sir.

(b) and (c). India has initiated a National programme in line with the overall objectives of the International Tropical Ocean Global Atmosphere (TOGA) programme. TOGA is a core project of the World Climate Research Programme (WCRP) which is jointly sponsored by the World Meteorological Organisation (WMO) and the International Council of Scientific Unions (ICSU). TOGA is designed to improve the understanding and predictability of weather and climate events, particularly in tropical oceans on seasonal and interannual scales.

Under the National programme, initiated during 1988-89, the National Institute of Oceanography has been collecting physical oceanographic and meteorological data along the shipping routes of Madras-Port Blair-Calcutta and Bombay-Mauritius. Fourteen tidegauges along Indian coast are under modernisation. A National TOGA data base centre has been established at Indian Institute of Tropical Meteorology, Pune. Based on the data generated under the programme, scientists are working towards better understanding of the monsoon characteristics with reference to meteorological features that are observed over Bay of Bengal and Arabian Sea. It also encompasses modelling of the monsoon variability over Indian region which has important societal/developmental implications.

[Translation]

Achievements in Science & Technology

2988. SHRI VILASRAO NAGNATHRAO GUNDEWAR: Will the PRIME MINISTER be pleased to state :

(a) the year-wise achievements in the field of Science & Technology during the last five years; and

(b) the details thereof?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE AND MINISTER OF STATE IN THE DEPARTMENT OF ATOMIC ENERGY AND DEPARTMENT OF SPACE AND MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI BHUVNESH CHATURVEDI) : (a) and (b). Some of the significant achievements/initiatives in the field of Science & technology during the last five years are as follows: (1) Establishment of major research groups with World Class capabilities in frontline areas of S&T; (2) Launching of technology mission mode projects in the areas of sugar production, advanced composites, flash disposal and utilisation; (3) Initiation of the Seismological Upgradation programme; (4) Numerical Weather Forecasting and Establishment of Communication Facilities for Agro Meteorological Field Units; (5) High Level of S&T capability in development of Parallel Processing Computer Systems; (6) Initiation of an Inter-Agency Programme on Drugs & Pharmaceuticals Research; (7) Setting up of a National Accreditation Board for testing and calibration laboratories to meet international quality standards; (8) self-reliance in the areas of nuclear reactor technology and its entire associated fuel cycle; (9) self-sufficiency in food production; (10) State-of-the-art communication and remote sensing satellites as well as launch 1000 kg class remote sensing satellites into the polar sunsynchronous orbit; (11) Bio-technology industry in India has come of age — There are now Plant Tissue culture industries, aquaculture, drugs and pharmaceuticals, biomolecules and immunodiagnostic industries; (12) Scientific expeditions to Antarctica and India's success in exploration and survey of deep sea polymetallic nodules has earned the country the distinction of being registered as a Pioneer Investor under the UN Convention on the Law of the Sea; (13) large number of technologies have been developed and commercialised in the fields of industrial catalysts, chemicals, food processing, leather processing and products, construction materials, drugs and pharmaceuticals and biomedical devices etc. (14) Action towards establishment of a Fund for Technology Development and Application to accelerate the development and application of indigenous technology to production processes; (15) Initiation of efforts to formulate a draft New Technology Policy; (16) New Fiscal incentives for promotion of R&D by Industry like Weighted Tax Reduction of 125% for sponsored research programmes; (17) Significant steps in allocations for scientific departments during this period;

[English]

Harnessing of NCES in Gujarat

2989. SHRI SHANKERSINH VAGHELA
SHRI CHANDRESH PATEL :

Will the PRIME MINISTER be pleased to state :

(a) whether power can be generated on large scale through non-conventional energy sources like sea-tides, wind-mills bio-gas, solar energy etc. in Jamnagar, Dwarka, Okha, Porbandar, Bhavnagar and other areas of Gujarat;

(b) if so, the details thereof including the efforts made in this regard;

(c) the year-wise extent of power in K.W. generated through these sources during the last five years in each district of Gujarat and other areas of the country?

(d) the power in k.w. likely to be generated through these sources during 1995, 1996 and 1997; and

(e) the type of assistance and financial assistance provided for generating power in Gujarat through these resources?

THE MINISTER OF STATE IN THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES AND MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI S. KRISHNA KUMAR) : (a) and (b). The State of Gujarat has good potential for generation of power from wind, solar and tidal energy etc. Wind power projects with aggregate capacity of 65 MW have been set up in Jamnagar, Dwarka, Okha, Porbandar and other areas of Gujarat. In addition to this one project of 2 MW capacity of Small Hydro and 3 projects of solar photovoltaics power with total capacity of 14 KM have also been commissioned in the State. The Ministry is also exploring the possibility of setting up of a 900 MW Tidal Power Project in the Gulf of Kutch.

(c) It is estimated that the generation of power is roughly 12-25 lakh units/MW from wind, about 40-50 lakh units/MW from small hydro, and 1400-1600 units/KW from solar photovoltaic power plants.

(d) The generation of power from non-conventional energy projects in Gujarat during 1995, 1996 and 1997 will depend on the aggregate installed capacity.

(e) Several promotional, financial and fiscal incentives are being provided by the Central and State Governments to encourage renewable energy power projects. The incentives include 100% accelerated depreciation, five year tax holiday, concessional custom duty, excise duty exemption, capital and interest subsidies. The State has also offered wheeling, banking and buy back facilities and sales tax incentive for power generated from NRSE.

Army Firing Practice

2990. SHRI V. SREENIVASA PRASAD : Will the PRIME MINISTER be pleased to state :

(a) whether attention of the Government has been drawn to the newsitem captioned "Furore over Army's firing

practice" appearing in the 'Statesman' dated July 25, 1995;

(b) if so, the facts thereof;

(c) whether there is any proposal to shift the existing practising range in order to protect affected human lives and environment; and

(d) if so, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF DEFENCE AND MINISTER OF STATE IN THE MINISTRY OF PARLIAMENTARY AFFAIRS AND HOLDING ADDITIONAL CHARGE OF MINISTER OF STATE IN THE MINISTRY OF RAILWAYS (SHRI MALLIKARJUN) : (a) and (b). Yes, Sir, the news item was regarding Netarhat Field Firing Range, a range notified by Government of Bihar up to May 2002 for firing practices by the Army. A firing practice was planned on the 3rd and 4th August 1995 and civil administration was approached for clearance. This drew an adverse reaction from the civilian population and Press as reported in 'Statement' dated 25.7.95. To avoid any untoward incident, the scheduled firing practice was cancelled by the Army.

(c) and (d). No, Sir. However, because of continuing pressure from the local population against the use of existing notified range, State Govt of Bihar have indicated that they are identifying an alternative site in lieu of Netarhat Field Firing Range. No such proposal has yet been received by the Govt of India from the State Govt.

Wind Farm

2991. SHRI DATTATRAYA BANDARU :

SHRI MANORANJAN BHAKTA :

Will the PRIME MINISTER be pleased to state :

(a) whether the first commercial wind farm has been set up recently in a non-coastal state :

(b) if so, the details thereof;

(c) whether the Government have drawn-up plan to tap wind energy potential in the country during the remaining period of Eighth Five Year Plan and also during the Ninth Five Year Plan; and

(d) if so, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF NON-CONVENTIONAL ENERGY SOURCES AND MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI S. KRISHNA KUMAR) : (a) and (b). The first commercial wind farm has been set up by Madhya Pradesh Windfarms Ltd., a joint sector company, at Jamgodarni in Devas District of Madhya Pradesh.

(c) and (d). Under the new Strategy and Action Plan,