

THE MINISTER OF STATE FOR ENVIRONMENT AND FORESTS AND MINISTER OF STATE IN THE MINISTRY OF PROGRAMME IMPLEMENTATION (SHRI-MATI MANEKA GANDHI): (a) According to the study conducted by Forest Survey of India with help of satellite imagery in the country during the period 1981-83 to 1985-87, there has been a reduction of 0.19 million hectares of forest cover during four years. The annual rate of loss works out to 47,500 hectares.

(b) and (c). Steps taken to check indiscriminate felling of forests are given in the statement below.

#### STATEMENT

##### *Steps taken to check denudation of forests*

1. The National Forest Policy, 1988, lays more emphasis on conservation of forests. There are specific provisions for protection of forests from grazing, fires and encroachment.
  2. Forest (Conservation) Act was enacted in 1980 to check diversion of forest land for non-forest purposes. The Act has been made more stringent by an amendment of 1988.
  3. A Centrally sponsored scheme is under implementation to assist the States for development of infrastructure for protection of forests.
  4. Alternative sources of energy are being encouraged to replace fuel-wood in domestic and commercial sectors.
  5. Wood is substituted by alternative materials in packaging, railway sleepers, building construction, furniture etc.
6. Import policy for timber has been liberalised.
  7. Fiscal incentives are given to industries for wood substitution.
  8. Efforts are being made to control shifting cultivation.
  9. Guidelines have been issued to State/UT Governments from time to time for protection of forests. Some of these guidelines are as follows:
    - (i) To avoid felling of natural forests and where such felling are inevitable for restoration of crop of other silvicultural consideration, it should be restricted to area not exceeding 10 hectares in the hills and 25 hectares in the plains.
    - (ii) To consider banning of felling in the hills above 1,000 meters atleast for some years.
    - (iii) To identify critical areas in the hills and mountains which require protection from felling of forests and need immediate vigorous afforestation.
    - (iv) To set apart 4% of the geographical area as protection area like wildlife sanctuaries, national parks, biosphere reserve etc.
    - (v) Special guidelines have been issued for protection of forests from forest fires.

[English]

#### **New Initiatives and Measures for Ocean Development**

908. SHRI PRAKASH V. PATIL: Will the PRIME MINISTER be pleased to state

the details of the new initiatives and measures being considered by Government for Ocean development?

THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND THE MINISTER OF STATE IN DEPARTMENT OF EDUCATION IN THE MINISTRY OF HUMAN RESOURCES DEVELOPMENT (PROF. M.G.K. MENON): (a) Ocean development activities have been given new impetus and direction, and it is proposed to concentrate on some key programmes that can generate high science and technology and attain criticality. Programmes such as aquaculture and coastal zone management which will help in generating employment for the rural and coastal areas have also been taken up. Some important new initiatives are briefly given below:

*Ocean Information System—Primary Data Base*

A project on Satellite to Sea Truth, generated with the help of ISRO and CSIR Centre for Mathematical Modeling, is now ready for implementation. The project is aimed at creating a real or semi-real time operationalized service for regular dissemination of important ocean parameters.

2. *Sea Bed Mining*

A project aimed at design and development of a deep seabed mining system has been generated with the help of various experts in the country and the Central Mechanical Research Institute (Durgapur) as the lead Agency.

3. *Antarctica*

In addition to continually raising the quality and scientific content of research activities at Maitri, a special exploratory expedition was sent in November, 1989 to the Weddell Sea Region of Antarctica, as a

part of a programme to develop first hand knowledge and understanding of the critical terrains of Antarctica to guide us in selecting an appropriate site, if it is later decided to set up a second permanent station in Antarctica.

4. *Research and training in modeling Oceanic Circulation and Air-Sea processes*

Recognizing that oceanic circulation plays a dominant role in determining all other oceanic processes, and the critical role of air-sea exchange processes in controlling weather, a project was especially generated to develop high level expertise in modeling and experiment design to study oceanic circulation and Air-Sea interface processes. This is being implemented through the establishment of a Cell in the Centre for Atmospheric Sciences at Indian Institute of Science, Bangalore.

5. *Monitoring and modelling of Pollution regimes in the sea*

Steps have been taken to upgrade the Regional Centre of NIO, Bombay to a state-of-the-art, first rate Centre for modeling and monitoring of marine pollution, with a view to quantifying transport rates of significant chemical elements through the estuaries and their inputs to various bio-geochemical reservoirs and finally into the sea.

6. *Sea level variations*

A programme for establishing a network of about 8 state-of-the-art tide-gauge stations along our coast and Islands is now underway towards documenting high precision information on sea level variations.

7. *Island Centre for Ocean Development*

Steps have been initiated for establishing a Centre for Ocean Development at Port Blair with a view to improving the quality

of life and of human endeavour generally amongst the Islanders, whilst preserving the integrity of the fragile eco-system of the Andaman and Nicobar Group of Islands.

**8. Aquaculture : Action Plan for alleviating poverty**

A projectized Action Plan on aquaculture has been initiated aimed at utilizing its S&T programmes and infrastructure in developing special assets in coastal wetlands, thereby improving the quality of life in rural areas. This programme is monitored by a special Steering Committee.

**Computer Literacy Programme in Schools in Maharashtra**

909. SHRI SUDAM DESHMUKH: Will the PRIME MINISTER be pleased to state:

(a) the existing stage of CLASS (Computer Literacy in School) Programme in the State of Maharashtra;

(b) the number of new computers which are proposed to be supplied to Schools of Maharashtra during the current year and at what Centres; and

(c) whether Government have reviewed the performance of CLASS in Maharashtra and if so, what modifications/changes are being carried out in the programme?

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) to (c). A Pilot Project for Computer Literacy and Studies in Schools (CLASS) was initiated in 1984-85 in 248 selected Secondary/Higher Secondary schools jointly by the Department of Electronics and the Department of Education to acquaint students and

teachers with the range of computer applications and its potential as a learning medium. The Project was further extended on year to year basis till 1988-89 covering 2079 more schools. So far 211 schools have been selected under the Project in Maharashtra. Besides, 5 resource centres which provide resource support to the participating schools, are in Maharashtra. No new computers have so far been provided in schools in Maharashtra during the current year. The Project had been evaluated by the Space Application Centre, Ahmedabad in 1986. The Project had also been reviewed by a Working Group constituted by the Government in October, 1986. The Group strongly advocated continuation of the Project and was of the view that the Project has made a very welcome beginning in upgrading and updating the education in schools in India. It has potential for encouraging and promoting innovativeness among teachers and students, creativity and analytical ability. It will enable students to gain familiarity with computers and enable them to face an increasingly technology oriented society. Following the recommendations of the Working Group, a draft Cabinet-note was prepared aiming to implement the CLASS Programme on a larger scale and on regular basis. It has not been possible so far to implement the proposed expanded programme on CLASS due to paucity of funds.

**Recommendations of Rashtriya Ved Vidya Pratishthan**

910. KUMARI UMA BHARATI: Will the PRIME MINISTER be pleased to state:

(a) whether in February, 1989 Rashtriya Ved Vidya Pratishthan had recommended sanctioning of three different types of projects on Vedic Mathematics to competent mathematicians and computer scientists;

(b) if so, the nature and type of these projects;