

MINISTRY OF SCIENCE AND TECHNOLOGY (DEPARTMENT OF ELECTRONICS AND DEPARTMENT OF OCEAN DEVELOPMENT) (SHRI RANGARAJANKUMARAMANGALAM): (a) and (b). During the year 1990-91, CSIR laboratories developed about 50 new knowhow and signed about 150 technology licence agreements, failed about 200 patents and contributed about 1900 scientific papers. The industrial production for the year, based on CSIR technologies, was estimated around Rs. 1300 crores. Some of the significant achievements during the year were:

i. *Commercialisation of:*

- novel catalyst for a single step process for the production of ethylbenzene;
- bimetallic reforming catalyst (for naphtha reforming)
- technologies for cyanocrylate adhesives and sodium azide (a mild explosive) and centchroman (a nonsteroidal female contraceptive)

ii. *development of:*

- aluminium alloy rivets for aircraft manufacture
- liquid nitrogen SQUID

Export of:

- knowhow for gugulipid (a hypolipidaemic) to France
- pentasil zeolite catalyst (for mild hydrocracking) to Holland
- consultancy services to China for setting up a Polymer Research Institute.

(c) During the Eighth Five Year Plan, starting from the year 1992-93, the CSIR would be concentrating on programmes in the following four categories:

- Industry and economy oriented
- Societal welfare
- Basic research
- Support activities and technical services for R & D

Electronic Industry in the North Eastern Region

4378. SHRI KIRIP CHALIHA: Will the PRIME MINISTER be pleased to state:

(a) whether much progress have not been achieved in Assam and other North Eastern States in the field of electronic industry as compared to other parts of the country; and

(b) if so, the steps taken/proposed to be taken by the Government for the development of electronic industry in this regions?

THE MINISTER OF STATE IN THE MINISTRY OF PARLIAMENTARY AFFAIRS AND MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY (DEPARTMENT OF ELECTRONICS AND DEPARTMENT OF OCEAN DEVELOPMENT) (SHRI RANGARAJAN KUMARAMANGALAM): (a) and (b). There has been progress towards promotion of electronics industry in Assam and other North-Eastern States. The total production of electronics from these States was Rs. 3.2 crores during 1991. The State Governments and their promotional agencies provide facilities and incentives for attracting entrepreneurs to set up electronic industries in the States. The steps taken by the Department of Electronics for promotion of

electronics industry in the North-Eastern region are given in Statement below.

STATEMENT

The following steps have been taken by the Department of Electronics (DOE) for promotion of electronics industry in the North Eastern Region.

1. At the suggestion of DOE, State Governments of Assam, Manipur, Meghalaya and Mizoram have set up State Electronics and Development Corporations (SEDCs).
2. Under Standardisation, Testing and Quality Control (STQC) Programme of the Department of Electronics, an Electronics Test and Development Centre (ETDC) has been set up at Guwahati for the region.
3. A Centre for Electronics Design and Technology (CEDT), an autonomous registered society under Department of Electronics has been set up at Imphal to impart training with special emphasis on design, product development, technology and manufacturing processes for the region.
4. Electronics Computer and Manpower development programmes; Master for Computer Applications (MCA), Post Graduate/ Post Polytechnic Diploma in Computer Application (PGDCA/PPDCA), Diploma in Computer Engineering (DCE) and ITI level Instructors' Training Programme in Computers have been supported in a number of educational institutions in the region.
5. To improve the quality of engineers

and technicians by way of strengthening of existing infrastructural facilities in laboratories upgradation of course curriculum and enhancing the teaching skills of the faculty; an Electronics Industry Development programme (Manpower Component) has been initiated with the World Bank assistance. Under this project, Assam Engineering Institute, Guwahati has been covered as one of the institutions.

6. To improve the quality of Tea, a Computerised monitoring system for withering, drying fermentation and rolling processes of tea industry has been developed by M/s. Assam State Electronics Development Corporation (AMTRON) with funding from DOE.
7. Electronics Trade & Technology Development Corporation (ET&T) Ltd., a public sector undertaking under the Department of Electronics is providing Consultancy services for setting up of an electronics industrial estate in Mizoram.
8. CMC Ltd., a public sector undertaking under the Department of Electronics is providing computer system consultancy/maintenance and software development/support services to a number of organisations in the region.

Sick Public Sector Undertakings

4379. SHRI HARISH NARAYAN PRABHU ZANTYE: Will the PRIME MINISTER be pleased to state:

- (a) the details of public sector undertakings reported sick during 1991-92.