विज्ञान और प्रौद्योगिकी मंत्री (डा॰ मुरली मनोहर जोशी): (क) और (ख) वर्तमान में बायोटेकोलांजी विभाग को मध्य प्रदेश में बायोटेकोलांजी पार्क को स्थापना करने के लिए कोई प्रस्ताव प्राप्त नहीं हुआ है।

## S&T Projects for Gujarat

2943. SHRI YOGINDER K. ALAGH: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

- (a) the names of the science and technology projects announced by the then Minister of Science and Technology at the convocation addresses at Sardar Patel University at Vallabh Vidyanagar and Gujarat University, Ahmedabad in 1997 for Gujarat;
- (b) the current status of these projects and any new projects announced with their status; and
- (c) the approach to science and technology plan for Gujarat stated in these convocation addresses and any new approaches Government may have developed?

THE MINISTER OF SCIENCE AND TECHNOLOGY (DR. MURALI MANOHAR JOSHI): (a) Some of the important science & technology projects mentioned in the convocation addresses at Sardar Patel University, Vallabh Vidyanagar and Gujarat University, Ahmedabad are:

- (i) Technology Development Project for manufacturing Undecenoic Acid and its derivatives based on technology developed by IICT, Hyderabad.
- (ii) Technology Development Project for manufacturing Vaccine at Cadila.
- (iii) Programme for strengthening Food Biotechnology Programme at SP University.
- (iv) MSc (Biotechnology) Programme at Gujarat University.

- (v) Bio-technology Village near Porbander
- (vi) Regional Sophisticated Instrumentation Centre for Applied Research and testing at Vallabh Vidyanagar.
- (vii) Establishment of Ocean Science & Technology Cell at Bhavnagar University.
- (viii) Project on Inte-grated Coastal and Marine Area Management.
- (ix) Software Technology Park at Gandhinagar.
- (x) Networking of Agricultural University Centre for access to new information and technology.
- (xi) ICAR All India Coordinated Research Project on horticultural crops.
- (b) The current status of these projects are:
  - (i) The Technology Development Board has provided a loan to M/S Gujarat Oleo Chem Limited for putting up a manufacturing plan, for Undecenoic acid and Heptaldehyde from castor oil, at GIDC Panoli, Ankleshwar at a total cost of Rs 2367 lakhs with TDB's loan amounting to Rs 333 lakhs.
  - (ii) M/s Cadila Pharmaceuticals Limited, Ahmedabad has been provided a loan of Rs. 450 lakhs out of a total cost of Rs. 900 lakhs for manufacture and commercial marketing of Recombinant Heptatitis-B vaccine.
  - (iii) Project at SP University sanctioned at a total cost of Rs. 35 lakhs for Strengthening of food biotechnology and training programme.
  - (iv) Rs. 70 lakhs provided for Post Graduate Programme in Biotechnology at Gujarat University, Ahmedabad.

- (v) The Model Biovillage Project (Moche-Gorser) near Porbander has progressed well with desalination plant, having been installed in January, 1999. Farmers were trained for use and production of Biofertilisers and Biopesticides at Gujarat Agricultural University Campus, Junagarh.
- (vi) The DST has set up a Sophisticated Instruments Centre for advanced Research and testing at Vallabh Vidyanagar at a total cost of Rs. 665 lakhs. The civil construction has been completed and a few instruments procured.
- (vii) The OSTC Cell has been set up at Bhavnagar University and based on their recommendations project mode support may be provided to individual projects from the current financial year.

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(viii) The project to develop a model Integrated Coastal & Marine Area Management plans for the Gulf of Kutch has been taken up during 1998-99. The concept and the model will be replicated to other coastal areas for an integrated development. Under this exercise, training will be provided to the coastal states in development of such plans and their adoption.

New projects/programme initiated included 10 R&D projects at a total cos. of Rs. 70 lakhs at various academic institutions and an innovation centre has been established at the Entrepreneurship Development Institute, Ahmedabad. Two technologies namely for manufacture of Anti Leprosy Vaccine and HIV Diagnostic kit have been transferred to MS Cadila Pharmaceuticals Limited.

- (c) The approaches to science and technology plan for Gujarat stated in these convocation addresses include:
  - integrated plan with multiinstitutional integration to achieve excellence in basic as well as applied research

- (ii) Development of appropriate technology to meet the user needs, with optimum local resources management.
- (iii) Re-orientation of science and technical education to make it

professionally useful and attract young talents towards science.

- (iv) Application of science and technology to improve quality of life of the common man.
- (v) More attention towards areas like information technology, new materials, Biotechnology and Services for Oceans and Water Development.

The S&T plan of the Gujarat State envisages (a) establishment of an institute to provide scientific/technological inputs for education, planning, training and extension; (b) establishment of Remote Sensing and Communication Centre; (c) to involve and educate the weaker sections for entrepreneurial skills; (d) to establish Institute in the area of Computers and Data Communication, and (e) development of educational software in regional languages for science popularisation.

बमोली में हाल में आए भूकम्प से प्रभावित क्षेत्र

2944. श्री कपिल सिब्बलः श्री राज मोहिन्दर सिंहः

क्या विज्ञान और प्रौद्योगिकी मंत्री यह बताने की कृपा करेंगे किः

- (क) क्या यह सच है कि हाल ही में उत्तर भारत में आए भूकम्प का मुख्य केन्द्र उत्तर प्रदेश का चमोली जिला था:
- (ख) यदि हां, तो इस विनाशकारी भूकम्प से कुल कितनी परिधि के अंदर का क्षेत्र प्रभावित हुआ था; और
- (ग) अधिकतम, सामान्य और न्यूनतम कंपन की परिधि वाले क्षेत्रों का अलग-अलग ब्यौरा क्या है जहां भारी, सामान्य और न्यूनतम क्षति हुई है?