

with the revival of the economy and the upbeat investment sentiment prevailing, the performance of the sector in the remaining years of the Plan would be better and Plan targets would be met. The progress of various projects in the port sector is being monitored closely at various levels.

#### **Agreements with US Institutions**

3000. SHRI SITARAM YECHURY: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

- (a) whether Government entered into collaborative agreements with various institutions of us under US-India knowledge initiative;
- (b) if so, the details thereof;
- (c) whether it is also a fact that several research institutions and universities entered into agreements with their counterparts in US under the agreement;
- (d) if so, the institution-wise details thereof; and
- (e) the fields of research for which they are collaborating?

THE MINISTER OF STATE OF THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI PRITHVIRAJ CHAVAN): (a) and (b) Consequent upon the understanding on cooperation in agriculture during the visit of Dr. Manmohan Singh, Hon'ble Prime Minister of India to the United States and meeting with H.E. President of USA, Mr. George W. Bush in July, 2005, the Ministry of Agriculture, Government of India and the U.S. Department of Agriculture (USDA) agreed to work together for a Indo-US Knowledge Initiative on Agricultural Education, Research, Services and Commercial Linkages. The objective of the Initiative is to re-energize Indo-US partnership by promoting teaching, research, service and commercial linkages to address contemporary challenges. It is particularly intended to promote agricultural education, research service and linkages in the areas of (i) Education, learning resources, curriculum development and training; (ii) Food processing and use of by-products and biofuels; (iii) Biotechnology; and (iv) Water management.

(c) No Sir.

(d) and (e) Does not arise.

#### **Human Genome**

3001. SHRI A. ELAVARASAN: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether India has joined an elite group of six nations which successfully decoded the human genome indigenously and Institute of Genomics which is a part of CSIR is sequencing the genome discovery; and

(b) if so, the details thereof?

THE MINISTER OF STATE OF THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI PRITHVIRAJ CHAVAN): (a) and (b) Yes Sir. The sequencing of the first human genome in India by Institute of Genomics and Integrative Biology (IGIB), Delhi, a constituent laboratory of Council of Scientific and Industrial Research (CSIR) has helped our country join the league of select countries. The scientists sequenced the genome of an anonymous healthy Indian citizen. Over 51 Gigabases of data was generated using next generation sequencing instruments. The genome assembly and mapping to the reference human genome was made possible with the CSIR supercomputing facility at IGIB. The sequencing of the human genome would enable scientists to understand the variations in the genome of an individual. The IGIB study has revealed that the present Indian genome has a large number of hitherto unknown variations. Understanding the functional role of variations would serve as a starting point to explore for disease associated variations.

#### **Districts in Gujarat under Natural Resources Data Management System**

3002. SHRI NATUJI HALAJI THAKOR: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) the number of districts of Gujarat particularly in Mehsana, Rajkot, Surat, Bharuch included in the Natural Resources Data Management System;

(b) whether Government proposes to include all the districts in the said Management System;

(c) if so, the details thereof; and

(d) the time by when all the districts of the State are likely to be included in Natural Resources Data Management System?

THE MINISTER OF STATE OF THE MINISTRY OF SCIENCE AND TECHNOLOGY (SHRI PRITHVIRAJ CHAVAN): (a) Nil.

(b) No Sir.

(c) Does not arise.

(d) Does not arise.