

then fifteen member nations of European Union (EU) agreed to reduce their greenhouse gas emissions by 8% in the same period. As the commitment period is not yet over, it would not be appropriate to conclude that 10 out of 15 EU nations have not met their targets.

(b) Energy security is vital for the economic growth of country and reduction of poverty. India has been investing for many years in green technologies including wind and biomass based technologies. Lately, further momentum has been given to the solar technology under the National Solar Mission. However, as renewable power is costly, the Government is also investing in clean coal technologies so that coal can be used in a most efficient manner to generate power.

(c) The Technology development and Transfer issue is under active discussion at the United Nations Framework Convention on Climate Change (UNFCCC). The discussions include a Technology Mechanism to accelerate the technology development and transfer in support of adaptation and mitigation activities. In the negotiations, India along with other developing countries have insisted that Annex-I Parties should commit between 0.5 to 1.0 % of their GDP towards adaptation, mitigation and technology development & transfer to developing countries.

#### **Receding of glaciers**

1093. SHRI T.K. RANGARAJAN: Will the Minister of ENVIRONMENT AND FORESTS be pleased to state:

(a) whether any competent agencies have conducted comprehensive studies and research on the receding of glaciers in the Himalayan range;

(b) if so, the details of such agencies;

(c) whether it is a fact that the glaciers are receding in this area;

(d) if so, whether any assessment has been made of the adverse impacts of the phenomenon on the Indian subcontinent; and

(e) if so, the details thereof and the precautionary measures proposed and to be taken by Government in this regard?

THE MINISTER OF STATE OF THE MINISTRY OF ENVIRONMENT AND FORESTS (SHRI JAIRAM RAMESH): (a) and (b) Some of the relevant research and educational institutions involved in / Glaciological Studies in the Himalayas in India are given in Statemnt (See below).

(c) to (e) The studies conducted by the Geological Survey of India indicate that the glaciers of Himalaya are receding at varying rates in different regions. The likely impacts include changes in the river hydrology, increased debris production and siltation of rivers in downstream regions.

The National Action Plan on Climate Change which was launched in June 2008, includes a National Mission for Sustaining the Himalayan Eco-system amongst its 8 national missions. A new research centre on Himalayan Glaciology has been established at Wadia Institute of Himalayan Geology, Dehradun. This Mission and the Centre would address the issues of Himalayan glaciers.

The Government has developed Guidelines and best practices for Sustaining Himalayan Eco-system (G-She), which have been shared with all State Governments in the Himalayan Region.

***Statement***

*Research and educational institutions involved in Glaciological Studies in the Himalayas in India.*

- Geological Survey of India, Northern Region, Lucknow, UP
- Wadia Institute of Himalayan geology, Dehradun, Uttarakhand
- Space Application Centre, Ahmedabad
- Regional Centre for Field Operations and Research on Himalayan Glaciology, University of Jammu, Jammu
- Geology department of the H. N. Bahaguna, Garhwal University, Uttarakhand
- Centre for the Study of Regional Development, School of Social Sciences Jawaharlal Nehru University, New Delhi
- Remote Sensing Applications Centre, Uttar Pradesh, Lucknow
- Glacier Study Centre of G. B. Pant Institute of Himalayan Environment and Development, Almora
- Snow Avalanche Study Establishment, Chandigarh
- Indian Institute of Technology, Bombay, Mumbai
- Birla Institute of Technology, Jaipur
- Geology Department, University of Lucknow, Uttar Pradesh
- Birbal Sahini Institute of Palaeobotany, Lucknow, Uttar Pradesh
- National Institute of Hydrology, Roorkee, Uttarakhand
- Physical Research Laboratories, Ahmedabad, Gujarat
- The Energy Research Institute (TERI)

**Assistance for increasing forest cover**

1094. SHRI R.C. SINGH: Will the Minister of ENVIRONMENT AND FORESTS be pleased to state:

(a) whether it is a fact that Thirteenth Finance Commission has recommended higher financial assistance to the States which increase their forest cover; and

(b) if so, the details thereof and the States that are going to be benefited as a result thereof?

THE MINISTER OF STATE OF THE MINISTRY OF ENVIRONMENT AND FORESTS (SHRI JAIRAM RAMESH): (a) and (b) Yes Sir. The Thirteenth Finance Commission (TFC) has derived a