

(b) Studies carried out so far indicate an increasing but statistically insignificant trend (at 95% confidence level) in winter precipitation in the Northwestern Himalayas including Jammu and Kashmir and statistically significant (95% level of confidence) decreasing trend in monsoon and overall annual precipitation during 1866-2006. Temperature data show significant increasing trends especially in winter and monsoon except over the Karakoram region.

(c) The areal extent of 1317 glaciers were monitored using satellite data shows overall 16% deglaciation till 2004 in Himalayas. Kumdan glaciers, of the Upper Shyok valley, have been the only exception which shows advancement in the glacial extent. The retreat during the nineties, began to slow down in respect of Siachen glacier, Machoi glacier, Darung Drung glacier, Gangotri glacier, Satopanth-Bhagirath Kharak glaciers and the Zemu glacier. These glaciers have not shown any retreat during the period 2007-09. In one study on the Gangotri glacier, it has been shown that there is no significant change in discharge during 1999-2003.

National Action Plan on Climate Change has formulated a Mission for Sustaining Himalayan Ecosystem primarily to seek and understand to what extent the glaciers are in recession and how the problem can be addressed.

#### **Schemes and study programme in Assam**

1458. SHRIMATI NAZNIN FARUQUE: Will the Minister of EARTH SCIENCES be pleased to state:

(a) the number of schemes and study programme initiated/conducted by the Ministry in Assam during the last three years;

(b) the details of funds allocated in this regard; and

(c) whether the Ministry has approached or going to approach the State Government for joint research work in the State?

THE MINISTER OF EARTH SCIENCES (SHRI S. JAIPAL REDDY): (a) No state specific schemes are operated by this Ministry Sir.

(b) Does not arise.

(c) No, Sir.

#### **Monsoon forecasts**

1459. SHRI BAISHNAB PARIDA: Will the Minister of EARTH SCIENCES be pleased to state: