

(b) Factors for the perceived delay are mentioned at part (a) above and SACOF-3 cannot be the reason for the delay in issuing monsoon season rainfall forecast for the country. In fact, SACOF-3 outlook for the South Asian region is finalized with the IMDs lead role only and after its establishment India has been hosting the SACOF Meetings for the last 3-years in succession as our South Asian partners do not have the institutional mechanisms to generate seasonal rainfall forecast outlook.

(c) Yes, Sir.

(d) Yes, Sir.

(i) As the seasonal rainfall outlook for the SACOF region for 2012 monsoon season has shown large divergence, ranging from deficient rainfall to normal/excess rainfall from various sources both from India and abroad viz. Japan Agency for Marine-Earth Science and Technology (JAMSTEC) and National Centers for Environmental Prediction (NCEP), USA indicated normal and below normal for most parts of the country based on two versions of the model. While the multi-model forecast from European Center for Medium Range Weather Forecasts (ECMWF), UK prepared based on coupled models of ECMWF, UKMO and Meteo France indicated normal to above normal rainfall over most parts of the country.

(ii) The El Nino-Southern Oscillation (ENSO) conditions over equatorial Pacific, significantly influences the performance of the monsoon season rainfall which was in transition phase from weak La Nina to neutral conditions. The latest forecasts from both statistical and dynamical models suggested 53% probability for continuation of neutral ENSO conditions during the monsoon season and about 39% probability for emergence of El Nino conditions during later part of the season. Therefore, things will become clear only after May. That is why IMD also updates its monsoon forecast in June after accounting for all these factors.

Earthquake research centre in coastal areas

4080. SHRI T. M. SELVAGANAPATHI: Will the Minister of EARTH SCIENCES be pleased to state:

(a) whether it is a fact that the coastal areas of the country is prone to earthquake;

(b) whether the previous records proves this fact;

(c) whether Government is considering to set up a research centre in one of the coastal locations; and

(d) if so, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF EARTH SCIENCES (SHRI ASHWANI KUMAR) : (a) Yes, Sir.

(b) Yes, Sir.

(c) No, Sir.

(d) Does not arise.

National policy on cloud seeding

4081. SHRI DILIPBHAI PANDYA: Will the Minister of EARTH SCIENCES be pleased to state:

(a) whether Government is aware that Gujarat has adopted cloud seeding technology to tackle drought in the state;

(b) whether Government is also aware that several States including Madhya Pradesh, Maharashtra etc., are trying to emulate Gujarat's cloud seeding experiment;

(c) whether Chief Minister of Chhattisgarh has urged the Central Government to evolve a national policy on cloud seeding to help drought prone areas of the country; and

(d) if so, the details in this regard?

THE MINISTER OF STATE IN THE MINISTRY OF EARTH SCIENCES (SHRI ASHWANI KUMAR): (a) Yes Sir. Gujarat is testing, in a limited way, on a local scale (5-10 Km range) warm cloud seeding methodology involving burning of candles made up of silver iodide and burning agents from 5 different locations simultaneously under typically identified atmospheric conditions (90% humidity, low wind conditions). The success of this experiment has not been assessed. As things stand today, artificial rain making techniques cannot be used for bringing rain clouds to rainfall deficit/drought areas. Such efforts can only induce potential pre-existing clouds, already passing over a given place, to produce rain only if organized weather modification intervention becomes successful.