

THE MINISTER OF STATE IN THE MINISTRY OF EARTH SCIENCES (SHRI Y. S. CHOWDARY): (a) Yes, Sir. From next year (2017), India Meteorological Department (IMD) is planning to implement a seasonal forecasting system that relies on a supercomputer based dynamical modeling system in addition to the existing statistical model based seasonal forecasting system. Both the forecasting systems will be used to prepare the operational seasonal forecasts. It may also be added that IMD is already using dynamical forecasting system for short range and medium range forecasts.

(b) No, Sir. It is not a fact that IMD's weather forecasts have been proving wrong constantly in recent times. IMD has been able to correctly predict several extreme weather and climate events like cyclones, deficient and excess monsoon rainfall, heat waves, heavy rainfall etc. in recent years. For example, IMD has been very successful in predicting the deficient Southwest monsoon season rainfall over the country during the recent two years (2014 and 2015) and cyclone PHAILIN and HUDHUD during 2013 and 2014 respectively.

(c) Yes, Sir. IMD's monthly forecast issued for rainfall of August was overestimated than the observed rainfall in 2016.

(d) The present long range forecast system based on the statistical models has shown some useful skill in predicting all India seasonal rainfall including the deficient monsoon season rainfall during 2015. However, in order to overcome the limitations of the statistical models used so far, dynamical coupled ocean-atmospheric model framework has been implemented under the National Monsoon Mission. IMD is planning to use dynamical forecasting system also to prepare the monthly and seasonal forecasts.

#### **Prediction of severe cold during current winter season**

1770. SHRI KIRANMAY NANDA: Will the Minister of EARTH SCIENCES be pleased to state:

(a) whether it is a fact that Scientists have predicted severe cold during current winter season, if so, the details thereof; and

(b) the details of Government's preparations to protect our citizens, army personnel on the border and agricultural crops?

THE MINISTER OF STATE IN THE MINISTRY OF EARTH SCIENCES (SHRI Y. S. CHOWDARY): (a) No, Sir. India Meteorological Department (IMD) has not yet issued the temperature forecast for current winter season. IMD will be issuing a temperature forecast outlook for the forthcoming winter season on 1st December, 2016.

(b) In addition to the seasonal forecast outlook, IMD will provide extended range forecasts (5-day averaged forecasts for next 15 days) of cold wave conditions over the country. This will be based on the Dynamical Extended Range Forecasting System. The forecasts will be made available through IMD, Delhi website ([www.imd.gov.in](http://www.imd.gov.in)). The warnings related to severe weather is also been sent to Ministry of Home affairs, National Disaster Management Authority (NDMA) and National Disaster Response Force (NDRF) regularly. IMD will also provide cold weather information and short range weather forecasts regularly. This information can be utilized for any preparations from the Government level during the winter season.

IMD under the Gramin Krishi Mousam Seva (GKMS) Scheme issues Agromet Advisories to the farmers of the concerned districts to safe guard the crops from severe cold and ground frost.

### **Safety of Indians in Syria**

1771. SHRI PRATAP SINGH BAJWA: Will the Minister of EXTERNAL AFFAIRS be pleased to state:

(a) whether adequate steps have been taken for the safety of life and property of Indians in Syria, if so, the details thereof;

(b) whether Government is aware of any cases of missing/abduction of Indians in Syria in the last three years and the current year; and

(c) whether Government has provided the people, who have returned from Syria, adequate financial aid and employment opportunities, if so, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF EXTERNAL AFFAIRS (SHRI M. J. AKBAR): (a) Government continues to closely monitor the situation in Syria and take necessary steps for the safety and security of Indian nationals residing there. Ministry of External Affairs has issued travel advisory for Indian nationals to avoid all travel to Syria.

(b) There are no cases of missing/abduction of Indians in Syria in the last three years and current year. However, four Indians, namely, S/Shri (1) Arun Kumar, (2) Sarvjeet Singh, (3) Kuldeep Singh, and (4) Joga Singh, who entered into Syria from Jordan on their way to Lebanon for employment without valid visas, were caught by the Syrian authorities as illegal immigrants. Their release was secured and they reached their homes in Haryana on 03.04.2016.

(c) The question did not arise as majority of Indian nationals returned from Syria immediately after issue of travel advisory in 2012.