GOVERNMENT OF INDIA MINISTRY OF EARTH SCIENCES RAJYA SABHA UNSTARRED QUESTION No. 811 TO BE ANSWERED ON THURSDAY, MARCH 03, 2016

Reliability of Forecasts of IMD

811. SHRIMATI WANSUK SYIEM:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether according to a survey conducted by National Council of Allied Economic Research, the agriculture specific forecasts of Indian Meteorological Department (IMD) have been found reliable by more than 93 percent for Indian farmers;
- (b) whether more than one million active fishermen along India's coastal districts rely on IMDs marine weather forecasting for operational ease;
- (c) whether agromet services presently served by 130 field units covering 633 districts are being expanded to provide block-level weather advisory from the present district level weather forecast and; if so, the details thereof?

ANSWER

MINISTER OF STATE FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTRY OF EARTH SCIENCES (SHRI Y. S. CHOWDARY)

- (a) Yes sir. According to a survey conducted by National Council of Applied Economic Research (NCEAR), the agriculture specific forecasts of Earth System Science Organization-India Meteorological Department (ESSO-IMD) have been found reliable by more than 93 percent of Indian formers. 95% of the farmers say that forecasts of ESSO-IMD have improved during last 2-4 years. Further:
 - Most of farmers felt that there had been an improvement in the timeliness of the weather forecasts.
 - Among various components of weather elements, rainfall component has the highest priority.

As per the NCAER report, farming community of the country is using the Gramin Krishi Mausam Sewa (GKMS) service products of ESSO-IMD for critical farm operations Viz. i) Management of sowing (Delayed onset of rains); ii) Changing crop variety (Delay in rainfall); iii) Spraying Pesticides for disease control (occurrence of rainfall); iv) Managing Irrigation (Heavy rainfall Forecast).

Concurrently, with the implementation of District Level Agro-Meteorological Advisory services, India has seen improved agriculture performance in the rain fed farming (Covers 60% of arable land).

(b) As per NCEAR report roughly one million marine fishermen are active fishers and they are benefited by Potential Fishing Zones (PFZ), Ocean State Forecast (OSF) Advisory Services of ESSO-Indian National Centre of Ocean Information Services (INCOIS). Out of one million approximately 0.66 million people are involved in allied fishing activities such as marketing fish, processing fish etc. Across the one million coastal fishermen community, the annual value addition during post Potential Fishing Zone Advisory Services since 2004-05 is assessed at Rs. 4700 crores. GDP contribution of PFZ and Ocean State Forecasting services for the fishery sector is assessed at 3.9 % in 2012-13 from 1.9% in 1995-96 and can potentially increase to 7.8%. Accordingly, additional annual income to fishermen is aggregated at Rs. 3,034 crores. Environmental benefits accrue further as the saving due to reduction in overall diesel consumption computed as carbon credits, on account on per unit catch due to targeted potential fishing zone identification, aggregates annually to Rs. 36,200/- Crores.

(c) Agro-meteorological services presently served by 130 field units covering 633 districts. Further research efforts are initiated by ESSO-IMD to explore possibility of generating sub district scale (block level) Agro-meteorological forecast with acceptable level of verification skill in a pilot mode.
