GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
LOK SABHA
UNSTARRED QUESTION No. 184
TO BE ANSWERED ON WEDNESDAY, JULY 18, 2018

PREDICTION OF MONSOON

184. SHRI PRATHAP SIMHA:

Will the Minister of EARTH SCIENCES be pleased to state:

(a) whether his Ministry has taken any important initiatives for considerable progress in prediction of monsoon and its variability in different time scales;
(b) if so, the details thereof and whether the Gramin Krishi Mausam Seva (GKMS) of IMD has been successful in providing the crop specific advisories to the farmers and the number of farmers in the country receiving the Agromet Advisories through SMS; and
(c) whether IMD is planning to establish District Agromet Units (DAMUs) at Krishi Vigyan Kendras (KVKs) at Coastal Districts in the country to generate granular Agromet Advisories and reach out to all the farmers to save the crops from weather aberration and ultimately increase the productivity of the crops; and
(d) if so, the number of Districts covered in the country for providing Agromet Advisories at present, State-wise?

ANSWER
MINISTER OF MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTRY OF EARTH SCIENCES
(DR. HARSH VARDHAN)

(a) Yes Madam. The Ministry of Earth Sciences (MoES) has taken lot of important initiatives for considerable progress in prediction of monsoon and its variability in different time scales. One of the most important achievements was the successful implementation of the "Monsoon Mission" to improve monsoon prediction & weather forecasts. The first phase of the Monsoon Mission was completed successfully in 2017, with lot of achievements, including setting up of very advanced dynamical prediction systems for Seasonal prediction; Extended range prediction (for next 20 days) and Short range prediction (up to 8 days). The seasonal prediction skill of Indian monsoon using dynamic models has also improved considerably. In addition to above, IMD uses state of art statistical models developed through in-house research and development work for Long Range Forecast of Monsoon

MoES has introduced two ensemble forecasting systems, viz., Global Ensemble Forecasting System (GEFS) and Unified Model Ensemble Prediction System (UMEPS), both with resolution of 12 km from 1st June, 2018. These models are being used for subdivision-wise forecast up to 7 days and district level rainfall forecast up to 5 days for monsoon season 2018.

(b) The Gramin Krishi Mausam Seva (GKMS) of India Meteorological Department (IMD) is rendered twice a week in collaboration with State Agricultural Universities (SAUs) and Institutions of Indian Council of Agricultural Research (ICAR). Under this, district level weather forecasts for next 5-days in respect of Rainfall, maximum temperature, minimum temperature, wind speed, wind direction, relative humidity and clouds, weekly cumulative rainfall forecast, and crop specific advisories are provided to farmers. The GKMS of IMD has been successful in providing the crop specific advisories to the farmers through different print/visual/Radio/ IT based media including short message service (SMS) and Interactive Voice Response Service (IVRS) facilitating for appropriate field level actions. At present 39 million farmers registered on MKisan portal are receiving the Agromet Advisories through SMS.

(c)-(d)Yes Madam. 530 District Agromet Units (DAMUs) will be established in the Krishi Vigyan Kendras (KVKs) in phase-wise manner to implement block level AAS in collaboration with KVKs of ICAR. At present, 130 Agromet Field Units under GKMS will issue block level Agromet Advisories for the district where the AMFU is located. Hence, all the blocks will be covered under GKMS. Details of DAMUs to be established during 2017-20 are mentioned below:

S.No	Year	No. of DAMUs to be established
1	2017-18	130
2	2018-19	400
3	2019-20	130

This includes all the coastal districts in the country. No of districts covered in the country for providing Agromet Advisories is mentioned in Annexure I.

Annexure I

Statewise number of districts for providing Agromet Advisories

S.No	State	No of Districts Covered
1	Andhra Pradesh	13
2	Telangana	9
3	Arunachal Pradesh	16
4	Assam	27
5	Bihar	38
6	Chhattisgarh	27
7	Gujarat	26
8	Haryana	21
9	Himachal Pradesh	12
10	Jammu and Kashmir	21
11	Jharkhand	24
12	Karnataka	30
13	Kerala	14
14	Madhya Pradesh	50
15	Maharashtra	33
16	Manipur	9
17	Meghalaya	11
18	Mizoram	8
19	Nagaland	11
20	Odisha	30
21	Punjab	22
22	Rajasthan	33
23	Tamil Nadu	32
24	Tripura	8
25	Uttar Pradesh	75
26	Uttarakhand	13
27	West Bengal	18
28	Andaman and Nicobar Islands	3
29	Delhi	1
30	Puducherry	2
	Total	637