



**Government of India
Earth System Science Organization
Ministry of Earth Sciences
India Meteorological Department**

**Press Release
Dated: 01st October, 2018
Time of Issue: 1500 hrs IST**

Sub: 2018 southwest monsoon rainfall

The 2018 southwest monsoon season (June to September) just ended with an over-all deficiency of 9% over the country as a whole. This all-India deficiency is mainly attributed to the very large rainfall deficiency observed over northeast India (24%). It is very rare for northeast (NE) India to receive this kind of large rainfall deficiency. During the period 1901-2017, only four years (1992, 2005, 2009 & 2013), the rainfall deficiency over NE India was more than 20%. Also, the northeast region, known for large scale floods, did not witness significant floods during the season. If this region had received normal rainfall, the all-India rainfall would have been 96 % of the Long Period Average (LPA).

However, over northwest India, central India and south Peninsula, seasonal rainfall distribution was satisfactory and well distributed as predicted, with only marginal rainfall deficiency of 2%, 7% and 2% respectively. The actual rainfall distribution during the season (June to September) and the long-range monsoon forecasts issued by the India Meteorological Department (IMD) during the second stage of forecast (end of May 2018) are given below:

S. No.	Region	Assessment in 2 nd stage LRF % of Long period average (LPA)	Realized rainfall at the end of the season % of LPA	Variation In %
1	North West India (± 8 model error)	100%	98%	-2%
2	Central India (± 8 model error)	99%	93%	-6%
3	South Peninsula (± 8 model error)	95%	98%	+3
4	East and NE India (± 8 model error)	93%	76%	-17%
5	All India (± 4 model error)	97%	91%	-6%

The long-range forecast issued for the All-India rainfall was slightly lower than the model error margin of the forecast (97% of the LPA). It may be mentioned that during the second stage, IMD predicted a high probability of 28% also for below normal rainfall, which is above its climatological probability (17%). The long range forecast for northwest India, central India and south Peninsula was however very accurate.

The 2018 season was characterized by large day to day variability within the season. However, many intense rainfall events during the season have led to flooding like the Kerala Floods. The season also witnessed formation of a large number of low pressure systems over Bay of Bengal and their westward movement across central India. During the season, 10 Low Pressure Areas formed, out of which one system intensified into a Cyclonic Storm, one into a Deep Depression and 4 into Depressions.

A preliminary scientific analysis reveals that the sea surface conditions over the equatorial Pacific (El Nino conditions) did not have any adverse effect on the performance of monsoon rainfall. India Meteorological Department (IMD) will come out with a detailed scientific analysis of the 2018 monsoon season by end of December 2018.

Southwest monsoon seasonal rainfall influences the agricultural and other allied sectors very significantly. It also decides the reservoir levels across the country. The acreage data of the Ministry of Agriculture suggest that overall crop acreage during the Kharif season is higher by 2.6% as compared to the highest ever acreage/record food production that India experienced during 2017. The resultant acreage is largely manifested by the good soil moisture distribution across the country. Adequate soil moisture available over northern parts of India may help the Rabi crops during 2018-19.

Reservoir levels monitored by the Central Water Commission (CWC) stands at around 5% higher than 10-year mean storages and 17% higher than the storages of corresponding period during 2017.
