

Weather

WINTER SEASON (JANUARY—FEBRUARY 1960)

Chief features—(1) Feeble activity of the western disturbances in north India, (2) Feeble activity of the easterly waves in the south Peninsula and (3) Deficient rainfall over most of the country.

The review of the Indian weather in the months of January and February is given below.

January—Three western disturbances affected the northern parts of the country during this month. Of these, the first caused a good amount of precipitation in the hilly regions of northwest India and also in Rajasthan and in the plains of west Uttar Pradesh and of the Punjab (I) during the middle of the month. Rain or snow was fairly widespread in Jammu and Kashmir, Himachal Pradesh and the Punjab-Kumaon hills between 13th and 15th. Simla recorded 7 cm of rain on 15th. The second western disturbance was also fairly active but the precipitation associated with it was confined mostly to the hilly regions of northwest India. Fairly widespread rain or snow occurred in Jammu and Kashmir on 20 January and in Himachal Pradesh on 21st. The third western disturbance of the month was feeble and moved away after causing scattered snowfall in Jammu and Kashmir on 30th.

Two of the easterly waves which affected weather in the south deserve mention. The first concentrated into a shallow depression over the southeast and adjoining southwest Bay of Bengal on 19th. It shifted westwards and weakened into a low over Ceylon and neighbourhood by 21st and moved away across the southeast Arabian Sea as a low pressure wave by 22nd. The second easterly wave moved from the southeast Bay of Bengal to the Comorin area between 23rd

and 28th. In association with these two waves, fairly widespread or local showers occurred in the Bay Islands between 22nd and 31st. A spell of wet weather also occurred in the Madras State from 20th to 25th and in Kerala from 22nd to 28th.

Another interesting feature was the persistence during the first half of the month of a quasi-stationary trough of low pressure extending from the Gulf of Cambay to southwest Madhya Pradesh. At the same time, the seasonal anticyclonic cell over the north Peninsula remained well marked and situated east of its normal position in the lower troposphere. These favoured a flow of moist air from the Bay of Bengal, around the periphery of the anticyclone, into the central parts of the country, giving rise to appreciable thunderstorm activity over the region. The rainfall amounts in west Madhya Pradesh and Vidarbha during this period were much more than the normal for the entire winter season.

The cold continental air which, as usual, spread over the northern and central parts of the country in the rear of the first active western disturbance of the month caused sub-normal minimum temperatures over the whole of north and central India, with a cold wave in parts of Madhya Pradesh on 19 January. Night temperatures were also much below normal in the central parts of the country from 23rd to 25th.

February—All the three western disturbances which affected the country during this month were feeble in intensity.

Two easterly waves moved through the Bay of Bengal during this month. The first

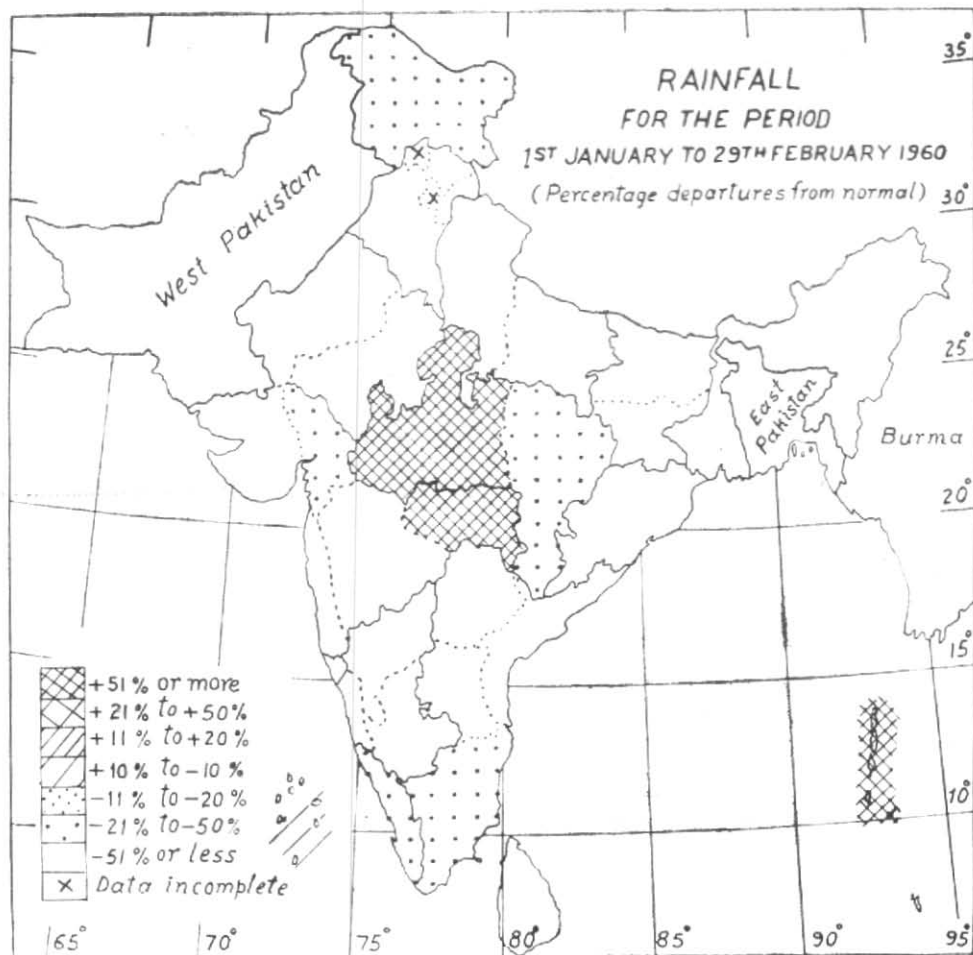


Fig. 1

was located over the Bay Islands on 5 February and over the south Madras State on 10th. It moved away across the Arabian Sea Islands by 12th. Under its influence, Long Island reported 16 cm of rain on 6th. The second easterly wave affected the Bay Islands on the 17th, Kondul reporting 11 cm of rain on that day. Moving westwards, this wave accentuated the seasonal trough over the south Bay which remained well marked during the rest of the month. During the last ten days of the month, a good amount of rain fell over the extreme south Peninsula. Mention

must also be made of the particularly heavy rain which occurred in Ceylon between 21st and 23rd and which was responsible for devastating floods in that island.

In north India, the minimum temperatures were above normal on most of the days during the month, being appreciably to markedly so over some parts during the second and third weeks of the month.

The rainfall map showing departures of the season's rain from normal is given in Fig. 1.