

UNUSUAL RAINFALL IN WEST BENGAL, BIHAR AND CHOTA-NAGPUR,
DURING APRIL—MAY, 1949.

Excessive thunderstorm activity was the cause of unusual wet weather in the Gangetic West Bengal, Bihar, Chota-Nagpur and Orissa, during April and first half of May. The conditions were such that public believed that the monsoon had arrived over the area a month earlier. The total rainfall during the period 1st April to 15th May was 2 to 5 times the usual value over different areas. At Calcutta, the total for the period was 15·6" (normal 4·3") and at Midnapore 20·8" (normal 4·1").

At Calcutta there was almost incessant rain from 0800 hrs. on 7-5-'49 to 1500 hrs. on 8-5 '49, the 24 hours total ending at 0830 hrs. 1ST on 8-5-'49 amounting to 5·70 inches at Alipore, and 8·66 inches at Dum Dum ; in the forty-eight hours from 6th to 8th evening, a total of 6·9 inches of rain was recorded at Alipore, and 9·9 inches at Dum Dum. Prior to 1949 there were only two occasions, in 1893 and 1932, when a day's rainfall in May at Alipore exceeded this figure, being 6·15 inches and 6·04 inches respectively ; but both these cases related to the second half of May (26-5-1893 and 24-5-1932) and the heavy rainfall was the result of cyclonic storms which crossed the South Bengal coast close to Calcutta.

The wet spell kept the temperature appreciably below normal throughout the period.

This unusual thundershower activity appears to be associated with the seasonal trough of low pressure, which had taken up frequently a position further to the South or Southwest than normally, and which thus allowed the pseudo-maritime air to the South and East of the trough to undergo a greater cyclonic curl and in consequence, greater convergence than what usually occurs in this season. The trough of low pressure on many days in the second half of April and the first half of May resembled closely the normal trough of the monsoon season.