

Weather

POST-MONSOON SEASON (OCTOBER—DECEMBER 1959)

Chief features—The season started with a severe cyclonic storm raging in the northwest Bay of Bengal and with the southwest monsoon activity persisting almost throughout the country. The storm subsequently caused huge loss of life and property in many districts of north Orissa and of coastal West Bengal in the first week of October. Another severe cyclonic storm developed in the Arabian Sea off the Kathiawar coast in the middle of October and was responsible for considerable damage in and near Saurashtra. These storms helped the southwest monsoon to linger over the country much beyond its normal date. It withdrew from the country by 18 October. The tracks of the storms and the depressions during the season are shown in Fig. 1 and the distribution of the season's rainfall in Fig. 2.

Description of the season's weather is given below.

A severe cyclonic storm of small extent was centred about 250 km south of Calcutta on the morning of 30 September. Moving in a northwesterly direction, it crossed coast near Balasore on the night of 30 September—1 October, weakened into a deep depression, moved further and by 5 October filled up over east Uttar Pradesh, northwest Madhya Pradesh and neighbourhood. In association with this storm, widespread rain with locally heavy to very heavy falls occurred in Gangetic West Bengal and the adjoining areas of Bihar between 1 and 4 October and in Orissa on 1st. Some of the noteworthy amounts of rainfall were—Burdwan 22 cm, Calcutta and Saugor Island 21 cm each, Balasore 20 cm and Baripada 19 cm on 1st, Dumka 18 cm on 2nd and 17 cm on 3rd and Purnea 18 cm on 3rd. According to press reports, the severe cyclonic storm caused gales and

widespread floods in many districts of West Bengal and north Orissa, leading to huge loss of life and property. The storm, according to these reports, blew off hundreds of roofs, uprooted a large number of trees and electric and telegraphic poles and disrupted the power supply in many districts of West Bengal, Bihar and Orissa. In Balasore district alone, about 8 lakh acres of standing paddy crops were completely destroyed, about 75 persons lost their lives and more than 1000 heads of cattle perished due to the cyclone. Many rivers in these districts rose in spate, submerging large tracts of land. At Garden Reach, Calcutta, the Hooghly river was reported to have registered an all-time tide record on 5 October.

A depression developed in the east Arabian Sea off the south Kathiawar coast with its centre about 200 km south of Mahuva at 0830 IST on 10 October. Moving in a northerly direction, it crossed the Saurashtra coast near Mahuva on 11th evening and remained practically stationary near Bhavnagar till 14th. Thereafter, it shifted towards south, emerged in the Arabian Sea as a deep depression on 15th morning and rapidly intensified into a cyclonic storm centred about 100 km southsouthwest of Veraval the same evening. It moved westwards and intensified further into a severe cyclonic storm of small extent with a core of hurricane winds centred about 600 km westsouthwest of Veraval on 17th morning. Continuing to move in a westerly direction, it struck the Kuria-Muria coast of Saudi Arabia on the night of 18th-19th. Under the influence of this storm, nearly general rain fell in Saurashtra, south Gujarat and the Konkan between 10th and 15th. A few heavy to very heavy falls were reported from Saurashtra between 12th and 15th,

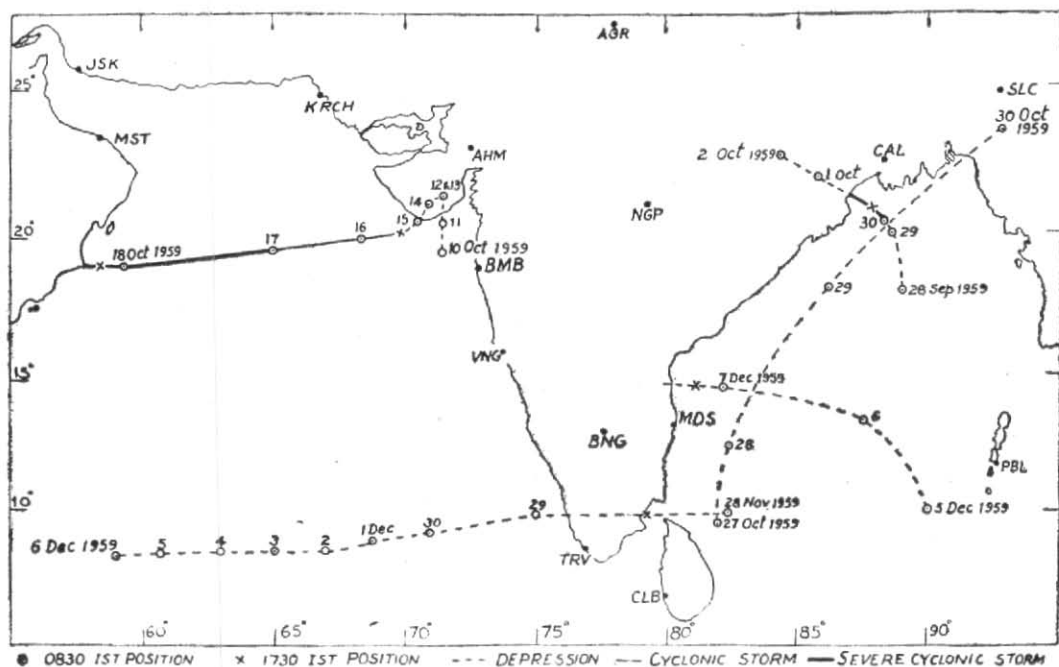


Fig. 1. Storms and depressions—October to December 1959

from south Gujarat on 12th and 13th and from the north Konkan on 13th and 14th. Some of the noteworthy amounts of rainfall were—Porbandar 21 cm and Dharampur (Gujarat) 13 cm on 12th, Dahanu 17 cm and Surat 12 cm on 13th, Veraval 10 cm on 14th and Rajkot 11 cm on 15th. These rains accompanied by squally winds caused considerable damage in and near Saurashtra. According to press reports, several houses collapsed, many human lives were lost and several hundred heads of cattle perished. Mahuva and Porbandar got completely isolated from the rest of Saurashtra due to floods. One 180-ton cargo vessel *Premasavai* and a few ferry boats and country craft were tossed by the squally winds off the Kathiawar coast and perished in the stormy sea.

This year, the monsoon was late in its withdrawal from the country. It withdrew from Jammu and Kashmir, Himachal Pradesh, the north Punjab (I) and west Rajasthan

only on 8 October, about three weeks later than the normal time. It withdrew from east Rajasthan, the south Punjab (I) and Uttar Pradesh on 13th. With the westward movement of the severe cyclonic storm of the Arabian Sea, the monsoon rapidly withdrew from the rest of the country by 18th.

A depression formed in the southwest Bay of Bengal with centre about 100 km northeast of Trincomalee on the morning of 27 October. It moved northwards and then northeastwards, and crossed the Sunderbans coast between Noakhali and Chittagong early on the morning of 30th. It filled up over Assam by 31st. In association with its formation and movement, fairly widespread rain or thundershowers occurred in the Madras State from 26th to 28th, in Kerala on 28th and 29th, in south interior Mysore and Rayalaseema on 28th, in coastal Andhra Pradesh on 28th and 29th, in Orissa on 29th, in coastal West Bengal on 29th and 30th and

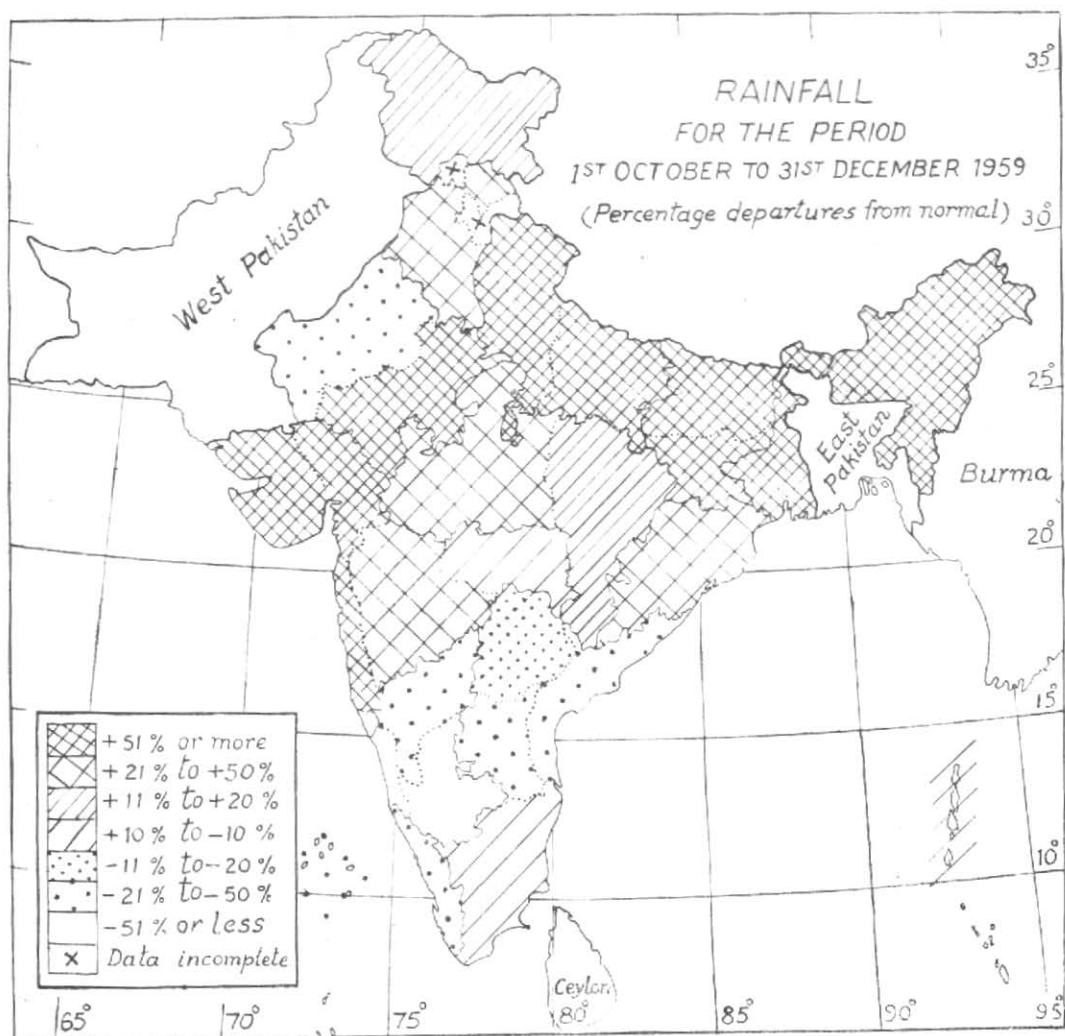


Fig. 2

in Assam on 30th. Some noteworthy amounts of rainfall were—Nagapattinam 14 cm on 27th and 8 cm on 28th, Madras 8 cm each on 27th and 28th, Cuddalore 9 cm on 27th, Nellore 13 cm and Palghat 10 cm on 28th, Salem 11 cm, Chandbali 10 cm and Gopalpur and Saugor Island 9 cm each on 29th and Haflong 24 cm, Silchar 10 cm and Imphal 8 cm on 30th.

Another depression formed in the southwest Bay of Bengal, centred about 300 km east-southeast of Nagapattinam at 0830 IST on 28 November. It took a westerly course and had a comparatively long life. It crossed the east coast between Nagapattinam and Pamban on the night of 28-29 November. By morning of 29th, it had emerged into the Arabian Sea and was centred about 125 km west of Cochin. It moved across southeast Arabian Sea and was probably a deep depression when it reached southwest Arabian Sea on 4 December. The system could be traced until it moved away west of Long. 60°E by 6th morning. In association with this depression, south Peninsula had a spell of wet weather from 28 November to 3 December. Fairly widespread rain occurred in Madras State from 28 November to 1 December, in Kerala on 30 November and 1 December, in the Arabian Sea Islands on 1 December and in coastal Mysore on 1 and 2 December. Kallakurichi (Madras State) reported a very heavy fall of 27 cm on 29th. Other noteworthy amounts of rainfall associated with this depression were—Madras 15 cm, Vellore 14 cm, Madurai and Kodaikanal 11 cm each on 29 November, Pamban 7 cm on 1 December and Kodaikanal 7 cm on 2nd. According to press reports, the heavy to very heavy rain in Madras State was responsible for flooding of the railway track between Tiruchirapalli and Villupuram (south Arcot district).

An easterly wave moved into the south Andaman Sea on 2 December. It moved

westwards and concentrated into a depression in the southeast Bay of Bengal by 5th morning with centre about 300 km west-northwest of Car Nicobar. Fairly widespread or local rain occurred in the Bay Islands from 3rd to 6th. Some noteworthy amounts of rainfall were—Kondul 8 cm on 3rd, Car Nicobar 8 cm on 4th and Mayabandar 9 cm on 5th. The depression moved first to northwest and then to west and was centred about 250 km east of Nellore on 7th morning. It moved inland into south coastal Andhra Pradesh as a low pressure wave by 8th morning. Showers occurred locally in coastal Andhra Pradesh and at a few places in Telangana and the Madras State on 8th.

Of the nine western disturbances which moved across the northern parts of the country during the season, only one deserves special mention. This disturbance was located over Afghanistan on 5 November. Moving in an east-northeasterly direction, it lay over the northern divisions of West Pakistan and the adjoining areas of the Punjab (I) with an active trough extending upto Sind on 6th. It moved away east-northeastwards across Kashmir and the Punjab-Kumaon hills by 9th after causing fairly widespread rain in the Punjab (I) on 6th and 7th and in Himachal Pradesh, Jammu and Kashmir and west Uttar Pradesh on 7th. Hissar reported 5 cm of rain on 6th, Gulmarg and Dharamsala 5 cm each on 7th and Dalhousie 9 cm on 7th and 5 cm on 8th. According to press reports, a severe rainstorm burst over Bareilly on 6th evening, temporarily paralysing life in the town and its neighbourhood.

It will be seen from Fig. 2, showing the distribution of the season's rainfall over the various sub-divisions of the country, that the rainfall was deficient in west Rajasthan, Andhra Pradesh, the Mysore State, Kerala and the Arabian Sea Islands and normal or above normal over the rest of the country.