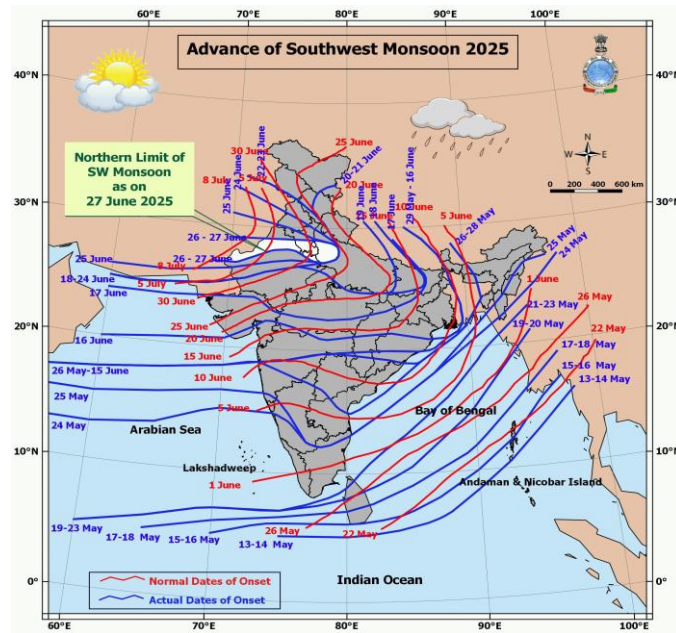
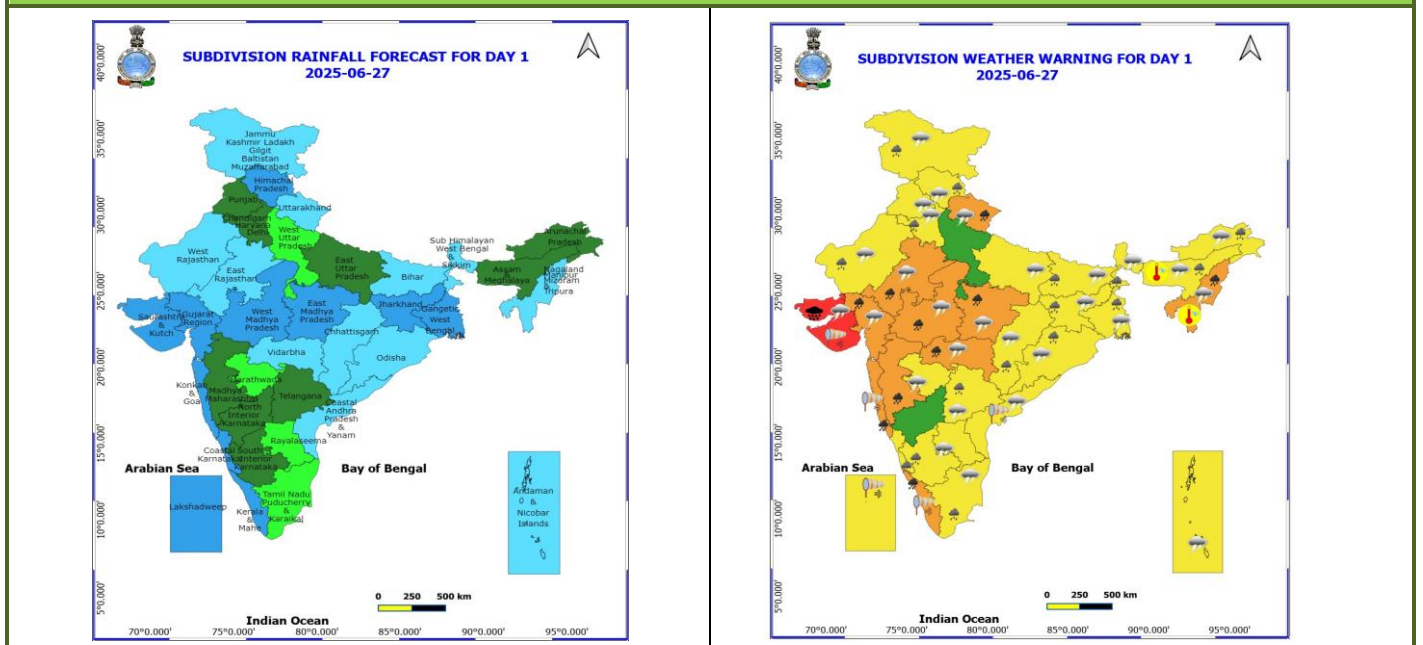


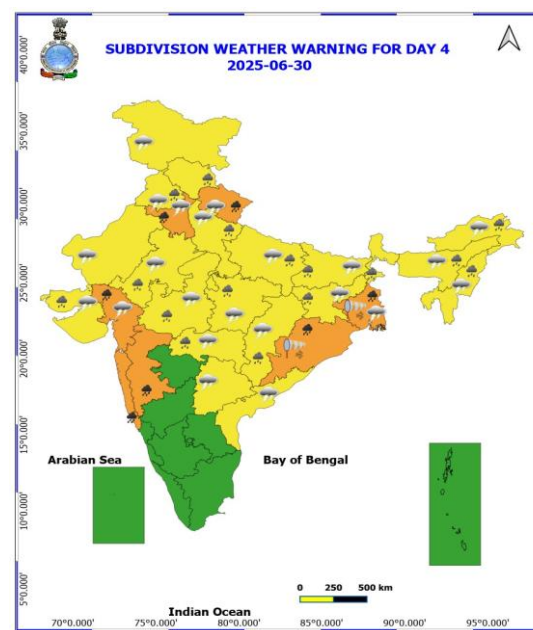
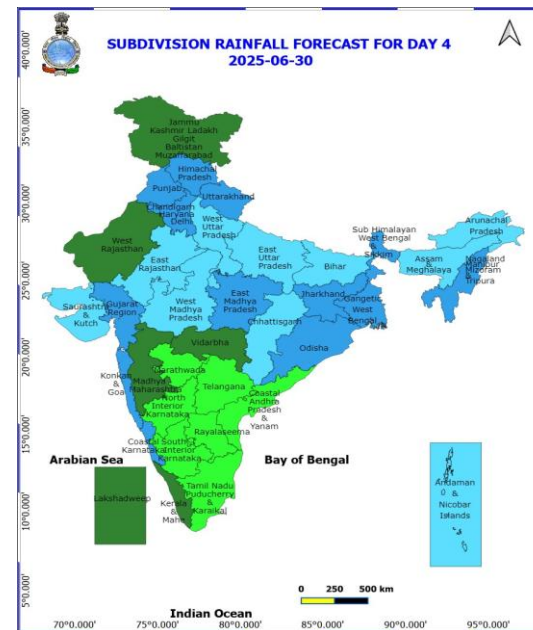
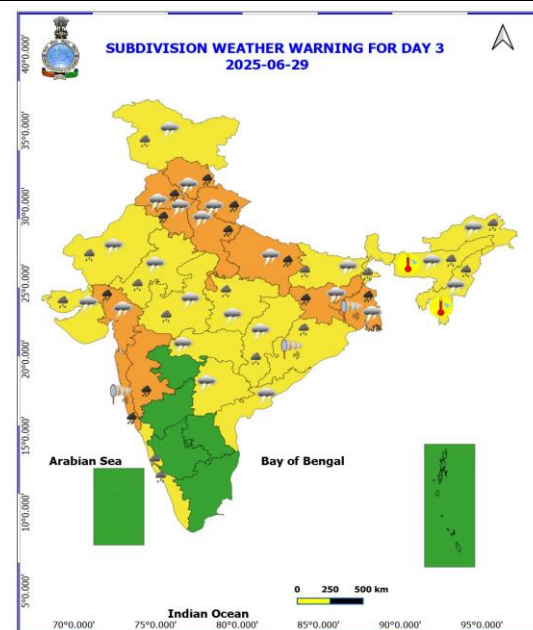
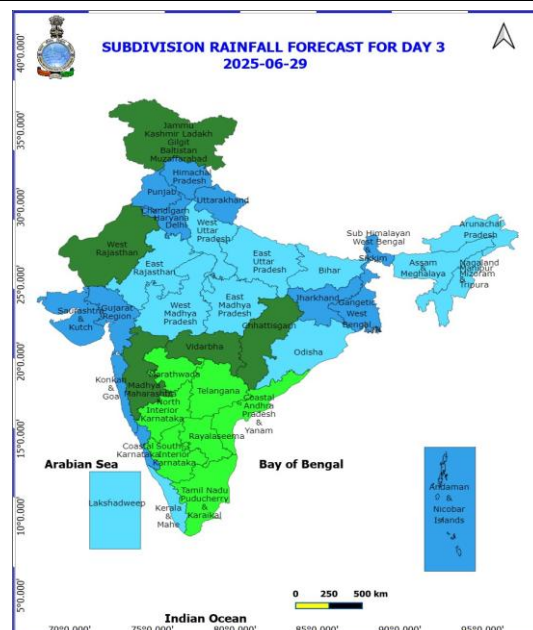
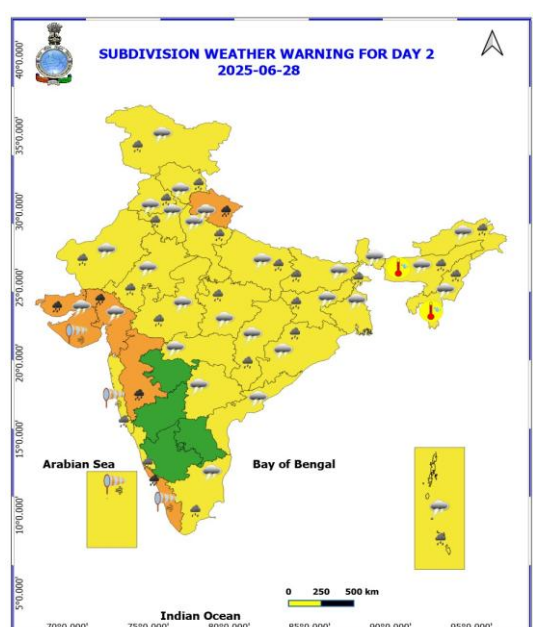
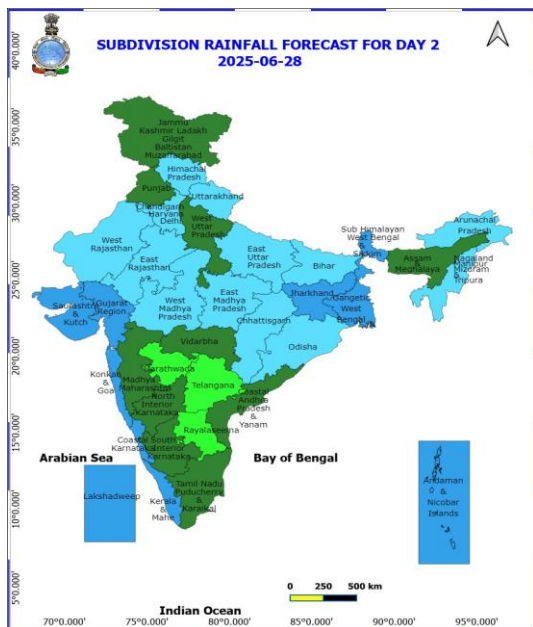
Advance of Southwest Monsoon 2025

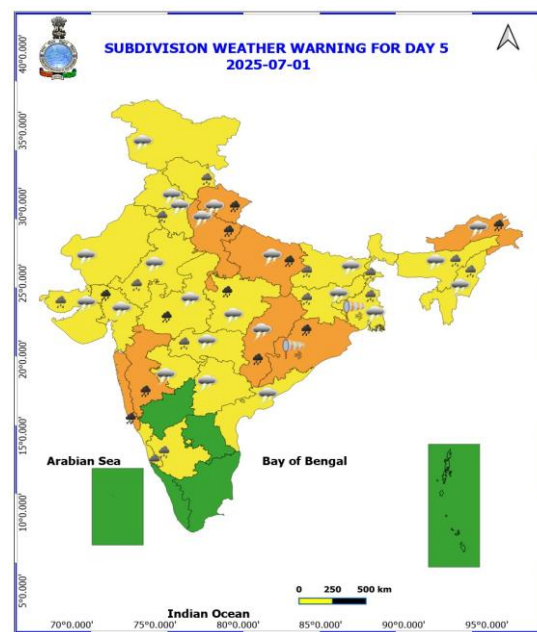
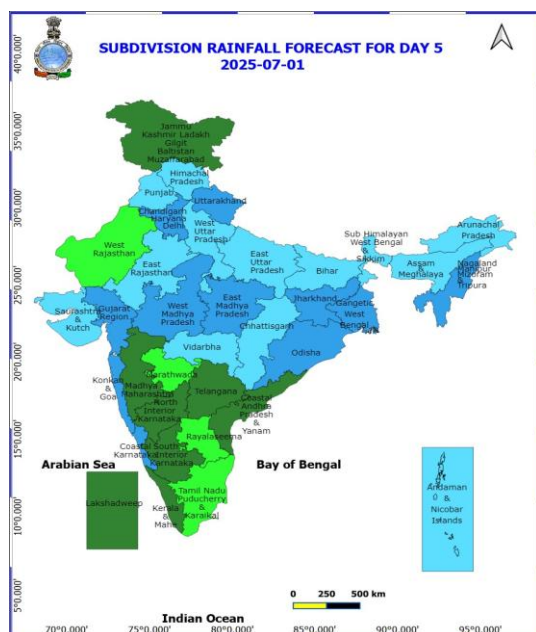


- ◆ The Northern Limit of Monsoon continue to pass through 27.0°N/68.5°E, 27.0°N/70.0°E, Jaisalmer, Bikaner, Jhunjhunu, Bharatpur, Rampur, Sonipat, Anup Nagar and 29.0°N/70.0°E.
- ◆ Conditions are becoming favourable for further advance of Southwest monsoon over remaining parts of the country during next 2- 3 days.

Sub-Divisionwise Rainfall Forecast and weather warning for next 5 days







Legend	Category	% Stations
WS	Widespread/Most Places	76-100
FWS	Fairly Widespread/Many Places	51-75
SCT	Scattered/A Few Places	26-50
ISOL	Isolated Places	1-25
DRY	No Rain	0

No heavy Rainfall	Heavy Rainfall / Snowfall
Heavy	
Very heavy	
Exceptionally Heavy	
No TS	Thunderstorm / Squall / Hailstorm
Light TS	
Moderate TS	
Severe TS / Very Severe TS / Hailstorm	

Weather Warning during next 5 days

27 June (Day 1)

- ♦ **Heavy to Very Heavy Rainfall with isolated Extremely Heavy Rainfall** very likely at isolated places over Saurashtra & Kutch.
- ♦ **Heavy to Very Heavy Rainfall** very likely at isolated places over East Rajasthan, Gujarat Region, Kerala & Mahe, Konkan & Goa, Madhya Maharashtra, Madhya Pradesh, Nagaland, Manipur, Mizoram and Tripura, Uttarakhand and Vidarbha.
- ♦ **Heavy Rainfall** very likely at isolated places over Arunachal Pradesh, Assam & Meghalaya, Bihar, Chhattisgarh, Coastal Karnataka, Haryana, Chandigarh & Delhi, Himachal Pradesh, Jammu-Kashmir-Ladakh-Gilgit-Baltistan- Muzaffarabad, Jharkhand, Odisha, South Interior Karnataka, Tamil Nadu Puducherry & Karaikal, Telangana, West Bengal & Sikkim and West Rajasthan.
- ♦ **Thunderstorm accompanied with lightning & gusty winds(30-40kmph)** very likely at isolated places over Andaman & Nicobar Islands, Bihar, Gangetic West Bengal, Gujarat State, Jammu-Kashmir-Ladakh-Gilgit-Baltistan- Muzaffarabad, Jharkhand, Odisha, Rajasthan, Vidarbha and West Madhya Pradesh.
- ♦ **Thunderstorm accompanied with Lightning** very likely at isolated places over Andhra Pradesh, Arunachal Pradesh, Assam & Meghalaya, Chhattisgarh, East Madhya Pradesh, East Uttar Pradesh, Haryana, Chandigarh & Delhi, Himachal Pradesh, Marathwada, Nagaland, Manipur, Mizoram and Tripura, Punjab, Sub Himalayan West Bengal & Sikkim, Tamil Nadu Puducherry & Karaikal, Telangana and Uttarakhand.
- ♦ **Strong Surface Winds** very likely at isolated places over Coastal Andhra Pradesh, Kerala & Mahe, Konkan & Goa, Lakshadweep and Saurashtra & Kutch.
- ♦ **Hot and Humid weather** very likely at isolated places over Assam & Meghalaya and Nagaland, Manipur,

Mizoram and Tripura.

- ♦ **Squally wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph** is likely to prevail along and off Somalia, Oman & adjoining Yemen coasts, most parts of westcentral Arabian Sea & adjoining, some parts of eastcentral, adjoining north Arabian Sea & adjoining southwest Arabian Sea.
- ♦ **Squally weather with wind speed 40 - 50 kmph gusting to 60 kmph** likely to prevail over most parts of eastcentral & adjoining areas of westcentral, northeast, south Arabian Sea, along and off Konkan, Goa, Karnataka, Kerala coasts, along and off Odisha coast and adjoining north Andhra Pradesh coast, along and off West Bengal coast, most parts of northwest and adjoining northeast Bay of Bengal, many parts of westcentral and adjoining eastcentral Bay of Bengal, over Gulf of Mannar.
- ♦ **Squally weather with wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over western parts of eastcentral & adjoining westcentral Arabian Sea, few western parts of westcentral Bay of Bengal.

28 June (Day 2)

- ♦ **Heavy to Very Heavy Rainfall** very likely at isolated places over Gujarat State, Kerala & Mahe, Madhya Maharashtra and Uttarakhand.
- ♦ **Heavy Rainfall** very likely at isolated places over Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya, Bihar, Chhattisgarh, Coastal Karnataka, Haryana, Chandigarh & Delhi, Himachal Pradesh, Jammu- Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Jharkhand, Konkan & Goa, Madhya Pradesh, Nagaland, Manipur, Mizoram and Tripura, Odisha, Punjab, Rajasthan, Sub Himalayan West Bengal & Sikkim, Tamil Nadu Puducherry & Karaikal and Uttar Pradesh.
- ♦ **Thunderstorm accompanied with lightning & gusty winds(30-40kmph)** very likely at isolated places over Andaman & Nicobar Islands, Bihar, Gangetic West Bengal, Gujarat State, Jammu-Kashmir-Ladakh-Gilgit-Baltistan- Muzaffarabad, Jharkhand, Odisha, Rajasthan and West Madhya Pradesh.
- ♦ **Thunderstorm accompanied with Lightning** very likely at isolated places over Arunachal Pradesh, Assam & Meghalaya, Chhattisgarh, Coastal Andhra Pradesh, East Madhya Pradesh, Haryana, Chandigarh & Delhi, Himachal Pradesh, Nagaland, Manipur, Mizoram and Tripura, Punjab, Sub Himalayan West Bengal & Sikkim, Tamil Nadu Puducherry & Karaikal, Telangana, Uttar Pradesh, Uttarakhand and Vidarbha.
- ♦ **Strong Surface Winds** very likely at isolated places over Kerala & Mahe, Konkan & Goa, Lakshadweep and Saurashtra & Kutch.
- ♦ **Hot and Humid weather** very likely at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram and Tripura.
- ♦ **Squally wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph** is likely to prevail along and off Somalia, Oman & adjoining Yemen coasts, most parts of westcentral Arabian Sea & adjoining, some parts of eastcentral, adjoining north Arabian Sea & adjoining southwest Arabian Sea.
- ♦ **Squally weather with wind speed 40 - 50 kmph gusting to 60 kmph** likely to prevail over most parts of eastcentral & adjoining areas of westcentral, northeast, south Arabian Sea, over Lakshadweep area, off south Gujarat, Konkan coasts, along and off Karnataka, Kerala, Odisha, West Bengal coasts, most parts of northwest and adjoining northeast Bay of Bengal, many parts of westcentral & adjoining eastcentral Bay of Bengal, some parts of southwest Bay of Bengal, over Gulf of Mannar.
- ♦ **Squally weather with wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over western parts of eastcentral & adjoining westcentral Arabian Sea.

29 June (Day 3)

- ♦ **Heavy to Very Heavy Rainfall** very likely at isolated places over Gangetic West Bengal, Gujarat Region,

Haryana, Chandigarh & Delhi, Himachal Pradesh, Jharkhand, Konkan & Goa, Madhya Maharashtra, Punjab, Uttar Pradesh and Uttarakhand.

- ♦ **Heavy Rainfall** very likely at isolated places over Arunachal Pradesh, Assam & Meghalaya, Bihar, Chhattisgarh, Coastal Karnataka, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Kerala & Mahe, Madhya Pradesh, Nagaland, Manipur, Mizoram and Tripura, Odisha, Rajasthan, Saurashtra & Kutch and Sub Himalayan West Bengal & Sikkim.
- ♦ **Thunderstorm accompanied with lightning & gusty winds(30-40kmph)** very likely at isolated places over Bihar, Gangetic West Bengal, Gujarat State, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Jharkhand and Rajasthan.
- ♦ **Thunderstorm accompanied with Lightning** very likely at isolated places over Arunachal Pradesh, Assam & Meghalaya, Chhattisgarh, Coastal Andhra Pradesh, Haryana, Chandigarh & Delhi, Himachal Pradesh, Madhya Pradesh, Nagaland, Manipur, Mizoram and Tripura, Punjab, Telangana, Uttar Pradesh, Uttarakhand and Vidarbha.
- ♦ **Strong Surface Winds** very likely at isolated places over Gangetic West Bengal, Konkan & Goa and Odisha.
- ♦ **Hot and Humid weather** very likely at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram and Tripura.
- ♦ **Squally wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph** is likely to prevail along and off Somalia, Oman & adjoining Yemen coasts, most parts of westcentral Arabian Sea & adjoining, many parts of eastcentral, adjoining north Arabian Sea & adjoining southwest Arabian Sea.
- ♦ **Squally weather with wind speed 40 - 50 kmph gusting to 60 kmph** likely to prevail over most parts of eastcentral & adjoining areas of westcentral, northeast, south Arabian Sea, off south Gujarat, Konkan coasts, along and off north Andhra Pradesh coast and adjoining south Odisha coast, most parts of westcentral Bay of Bengal and adjoining parts of northwest, eastcentral, southwest Bay of Bengal.
- ♦ **Squally weather with wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over western parts of eastcentral & adjoining westcentral Arabian Sea, over Gulf of Mannar.

30 June (Day 4)

- ♦ **Heavy to Very Heavy Rainfall** likely at isolated places over Gangetic West Bengal, Gujarat Region, Haryana, Chandigarh & Delhi, Konkan & Goa, Madhya Maharashtra, Odisha and Uttarakhand.
- ♦ **Heavy Rainfall** likely at isolated places over Arunachal Pradesh, Assam & Meghalaya, Bihar, Chhattisgarh, East Rajasthan, Himachal Pradesh, Jharkhand, Madhya Pradesh, Nagaland, Manipur, Mizoram and Tripura, Punjab, Saurashtra & Kutch, Sub Himalayan West Bengal & Sikkim, Uttar Pradesh and Vidarbha.
- ♦ **Thunderstorm accompanied with lightning & gusty winds(40-50kmph)** likely at isolated places over Jammu- Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad.
- ♦ **Thunderstorm accompanied with lightning & gusty winds(30-40kmph)** likely at isolated places over Bihar, Gangetic West Bengal, Gujarat State, Jharkhand and Rajasthan.
- ♦ **Thunderstorm accompanied with Lightning** likely at isolated places over Arunachal Pradesh, Assam & Meghalaya, Chhattisgarh, Coastal Andhra Pradesh, Haryana, Chandigarh & Delhi, Madhya Pradesh, Nagaland, Manipur, Mizoram and Tripura, Punjab, Telangana, Uttar Pradesh, Uttarakhand and Vidarbha.
- ♦ **Strong Surface Winds** likely at isolated places over Gangetic West Bengal and Odisha.
- ♦ **Squally wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph** is likely to prevail along and off Somalia, Oman & adjoining Yemen coasts, most parts of westcentral Arabian Sea & adjoining, many parts of eastcentral, adjoining, some parts of north Arabian Sea & adjoining southwest Arabian Sea.

- ♦ **Squally weather with wind speed 40 - 50 kmph gusting to 60 kmph** likely to prevail over most parts of eastcentral & adjoining areas of westcentral, south Arabian Sea, most parts of northeast Arabian Sea, along and off Gujarat, Konkan coasts, many parts of central Bay of Bengal and adjoining parts of northwest, southeast Bay of Bengal.
- ♦ **Squally weather with wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph** likely to prevail over western parts of eastcentral & adjoining westcentral Arabian Sea.

01 July (Day 5)

- ♦ **Heavy to Very Heavy Rainfall** likely at isolated places over Arunachal Pradesh, Chhattisgarh, Gujarat Region, Konkan & Goa, Madhya Maharashtra, Madhya Pradesh, Odisha, Uttar Pradesh and Uttarakhand.
- ♦ **Heavy Rainfall** likely at isolated places over Assam & Meghalaya, Bihar, Coastal Karnataka, East Rajasthan, Haryana, Chandigarh & Delhi, Himachal Pradesh, Jharkhand, Nagaland, Manipur, Mizoram and Tripura, Saurashtra & Kutch, South Interior Karnataka, Vidarbha and West Bengal & Sikkim.
- ♦ **Thunderstorm accompanied with lightning & gusty winds(40-50kmph)** likely at isolated places over Jammu- Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad.
- ♦ **Thunderstorm accompanied with lightning & gusty winds(30-40kmph)** likely at isolated places over Bihar, Gangetic West Bengal, Gujarat State, Jharkhand and Rajasthan.
- ♦ **Thunderstorm accompanied with Lightning** likely at isolated places over Arunachal Pradesh, Assam & Meghalaya, Chhattisgarh, Coastal Andhra Pradesh, Haryana, Chandigarh & Delhi, Madhya Pradesh, Marathwada, Nagaland, Manipur, Mizoram and Tripura, Punjab, Telangana, Uttar Pradesh, Uttarakhand and Vidarbha.
- ♦ **Strong Surface Winds** likely at isolated places over Gangetic West Bengal and Odisha.
- ♦ **No Fishermen Warning**

Advisory for fishermen

- As Squally wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph is likely to prevail along and off Somalia, Oman & adjoining Yemen coasts, most parts of westcentral Arabian Sea & adjoining, some parts of eastcentral, adjoining north Arabian Sea & adjoining southwest Arabian Sea. Squally weather with wind speed 40 - 50 kmph gusting to 60 kmph likely to prevail over most parts of eastcentral & adjoining areas of westcentral, northeast, south Arabian Sea, along and off Konkan, Goa, Karnataka, Kerala coasts, along and off Odisha coast and adjoining north Andhra Pradesh coast, along and off West Bengal coast, most parts of northwest and adjoining northeast Bay of Bengal, many parts of westcentral and adjoining eastcentral Bay of Bengal, over Gulf of Mannar. Squally weather with wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph likely to prevail over western parts of eastcentral & adjoining westcentral Arabian Sea, few western parts of westcentral Bay of Bengal on 27th June, 2025; Squally wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph is likely to prevail along and off Somalia, Oman & adjoining Yemen coasts, most parts of westcentral Arabian Sea & adjoining, some parts of eastcentral, adjoining north Arabian Sea & adjoining southwest Arabian Sea. Squally weather with wind speed 40 - 50 kmph gusting to 60 kmph likely to prevail over most parts of eastcentral & adjoining areas of westcentral, northeast, south Arabian Sea, over Lakshadweep area, off south Gujarat, Konkan coasts, along and off Karnataka, Kerala, Odisha, West Bengal coasts, most parts of northwest and adjoining northeast Bay of Bengal, many parts of westcentral & adjoining eastcentral Bay of Bengal, some parts of southwest Bay of Bengal, over Gulf of Mannar. Squally weather with wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph likely to prevail over western parts of eastcentral & adjoining westcentral Arabian Sea on 28th June 2025; Squally wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph is likely to prevail along and off Somalia, Oman & adjoining Yemen coasts, most parts of westcentral Arabian Sea & adjoining, many parts of eastcentral, adjoining north Arabian Sea &

adjoining southwest Arabian Sea. Squally weather with wind speed 40 - 50 kmph gusting to 60 kmph likely to prevail over most parts of eastcentral & adjoining areas of westcentral, northeast, south Arabian Sea, off south Gujarat, Konkan coasts, along and off north Andhra Pradesh coast and adjoining south Odisha coast, most parts of westcentral Bay of Bengal and adjoining parts of northwest, eastcentral, southwest Bay of Bengal. Squally weather with wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph likely to prevail over western parts of eastcentral & adjoining westcentral Arabian Sea, over Gulf of Mannar on 29th June 2025; Squally wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph is likely to prevail along and off Somalia, Oman & adjoining Yemen coasts, most parts of westcentral Arabian Sea & adjoining, many parts of eastcentral, adjoining, some parts of north Arabian Sea & adjoining southwest Arabian Sea. Squally weather with wind speed 40 - 50 kmph gusting to 60 kmph likely to prevail over most parts of eastcentral & adjoining areas of westcentral, south Arabian Sea, most parts of northeast Arabian Sea, along and off Gujarat, Konkan coasts, many parts of central Bay of Bengal and adjoining parts of northwest, southeast Bay of Bengal. Squally weather with wind speed reaching 45 kmph to 55 kmph gusting to 65 kmph likely to prevail over western parts of eastcentral & adjoining westcentral Arabian Sea on 30th June 2025, **fishermen are advised not to venture into these areas.**

Salient advisories

- As **rain/thundershowers** at many/most places likely over Jammu & Kashmir, Coastal Andhra Pradesh & Yanam during next 24 hours, over Rajasthan during next 48 hours, over Kerala & Mahe, Lakshadweep during next 72 hours, over Vidarbha on 27th June and 1st July, over East Uttar Pradesh on 28th, over Himachal Pradesh, Uttarakhand, Haryana Chandigarh & Delhi, Madhya Pradesh, Gujarat State, Konkan & Goa, Coastal Karnataka, Andaman & Nicobar Islands, West Bengal & Sikkim, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Jharkhand, Bihar, Chhattisgarh, Odisha during next 4-5 days, over Punjab, East Rajasthan, Uttar Pradesh, Assam & Meghalaya during 29th June to 1st July, and **Heavy to Very Heavy Rainfall with isolated Extremely Heavy Rainfall** very likely at isolated places over Saurashtra & Kutch during next 24 hours; **Heavy to Very Heavy Rainfall** very likely at isolated places over East Rajasthan, Nagaland, Manipur, Mizoram and Tripura and Vidarbha during next 24 hours, over Kerala & Mahe during next 48 hours, over Gujarat Region, Madhya Maharashtra and Uttarakhand during next 5 days, over Konkan & Goa on 27th, 29th, 30th and 1st July, over Madhya Pradesh on 27th and 1st July; **Heavy Rainfall** very likely at isolated places over Odisha, South Interior Karnataka, Telangana, West Rajasthan and Tamil Nadu Puducherry & Karaikal during next 24 hours, over Assam & Meghalaya and Bihar during next 5 days, over Arunachal Pradesh and Chhattisgarh during next 4 days, over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad during next 3 days, over Coastal Karnataka on 27th, 28th, 29th June and 1st July, over Himachal Pradesh and Jharkhand on 27th, 28th, 30th June and 1st July, over Haryana, Chandigarh & Delhi on 27th, 28th June and 1st July, over West Bengal & Sikkim on 27th June and 1st July, over Andaman & Nicobar Islands, Tamil Nadu Puducherry & Karaikal and Konkan & Goa on 28th, over Odisha and Rajasthan on 28th and 29th, over Madhya Pradesh and Sub Himalayan West Bengal & Sikkim during 28th to 30th, over Nagaland, Manipur, Mizoram and Tripura on 28th, 29th June and 1st July, over Punjab and Uttar Pradesh on 28th and 30th, over Kerala & Mahe on 29th, over Saurashtra & Kutch on 29th, 30th June and 1st July, over East Rajasthan and Vidarbha 30th June and 1st July, over South Interior Karnataka on 1st July, postpone irrigation, intercultural operations and application of plant protection measures & fertilizers to the standing crops. Provide adequate drainage in standing crop fields to avoid waterlogging.
- **Gujarat** - Postpone sowing of rice nurseries, groundnut, pearl millet, sorghum, pigeon pea, green gram, and black gram. Ensure proper drainage facilities in already sown rice nurseries, sugarcane fields, banana and mango plantations to prevent waterlogging. Provide support to sugarcane and banana to prevent lodging.
 - **Saurashtra & Kutch** - Drain out excess rain water from vegetable nurseries and horticultural plantations. Undertake propping in sugarcane with strong bamboo or tie the leaves together in a clump to protect against wind and heavy rain.

- **Maharashtra** - Make arrangements to drain out excess water in **Konkan & Goa** from rice nurseries, fields of finger millet, groundnut and orchards; from rice nurseries, vegetables and orchards to **In ghat areas of Madhya Maharashtra**,; from vegetable nurseries and orchards in **Vidarbha**, In **Konkan, Madhya Maharashtra and Vidarbha**, provide mechanical support to newly planted orchards and vegetables to prevent them from lodging.
- **Madhya Pradesh** - In **West Madhya Pradesh**, postpone harvesting of maize. Postpone sowing of pearl millet, soybean, pigeon pea and paddy nurseries. Make necessary arrangements to drain out excess water from vegetables and orchards to avoid waterlogging. In **East Madhya Pradesh**, harvest matured maize, green gram and black gram during favourable weather and store in safe places. Ensure proper drainage in already sown / transplanted fields.
- **Arunachal Pradesh** - To protect the maize crop from damage due to runoff and soil erosion, construct small bunds or contour barriers across the slope to reduce water flow and soil loss. Avoid fresh transplanting of rice in low-lying areas. Provide strong support to banana plants using bamboo or wooden stakes to prevent lodging or stem breakage.
- **Himachal Pradesh** - In **Sub-Montane and Low Hills Sub-Tropical Zone**, provide drainage in maize and vegetable fields. Strengthen the support for creepers and tall vegetable crops (tomato, capsicum etc.). In **Mid Hills Sub-Humid Zone**, harvest matured fruits of plum, pear and stone fruit to minimize losses due to heavy rains. Make proper drainage channels in the fields of maize, apple, pear, pomegranate, kiwi, cucumber and tomato to avoid waterlogging. Provide support to cucumber vines and tomato plants to prevent lodging.
- **Uttarakhand** - Make proper drainage channels in rice nurseries, pigeon pea, groundnut, maize, soybean, barnyard millet and finger millet to avoid waterlogging. In **Bhabar and Tarai Zone**, harvest matured spring maize and vegetables (pumpkin, tomato, okra, chilli, French bean etc.) and store in safe place during clear weather.
- **Punjab** - Drain out excess water from cotton, maize fields and orchards.
- **East Rajasthan** - Harvest the matured vegetables such as okra and cucurbits and store them in safe place. Make arrangement for draining out excess water from the fields of groundnut and green gram.
- **Jharkhand** - Make necessary arrangements to drain out excess water from already sown maize fields, rice and vegetable nurseries.
- **Uttar Pradesh** - In **Central Zone**, make proper arrangement for drainage of excess rain water from rice nursery. Postpone sowing of maize and sesame till the weather clears. In **Eastern Plain Zone**, drain excess water from rice nurseries and vegetable plots; Sow the early maturing variety of pigeon pea, Barnyard millet, *Sawan* and *Kodo* during fair weather.
- **Odisha** - Ensure proper drainage from already sown rice nurseries, fields of maize and vegetables to prevent waterlogging. Cover the nurseries of rice and vegetable with plastic sheets to prevent washing away of seeds. In **Keonjhar** district, postpone sowing of maize and green gram. Drain out excess water from maize and vegetables. In **Mayurbhanj** district, provide strong wooden support for papaya and banana plants to avoid lodging due to high wind speed.
- **Gangetic West Bengal** - In **Coastal Saline Zone**, in ginger avoid water stagnation at the base; to avoid rotting of rhizome spray fungicide during clear weather. In **Bankura** district, harvest matured crops immediately and store them in a dry and safe place. Make necessary arrangements for draining out excess water from rice fields.
- **Chhattisgarh** - Ensure proper drainage in rice nurseries. In **North Hill Zone**, provide mechanical support to orchards and other tall/weak crops with stakes or bamboo to prevent lodging or breakage.
- **Tamilnadu** - In *ghat* regions provide adequate drainage in rice nurseries, sorghum, maize, pulses, groundnut, sugarcane, orchards and vegetable crops.
- **Kerala** - Ensure proper drainage facilities in rice nurseries, transplanted rice fields, coconut and

banana plantations to prevent water logging. Undertake propping in banana to protect the plants from heavy rains

- As **Thunderstorm accompanied with lightning & gusty** winds (40-50 kmph) likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 30th June and 1st July; **Thunderstorm accompanied with lightning & gusty winds(30-40kmph)** likely at isolated places over Vidarbha during next 24 hours, over West Madhya Pradesh, over Odisha, Andaman & Nicobar Islands during next 48 hours, over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad during next 3 days, over Jharkhand, Bihar, Rajasthan and Gangetic West Bengal during next 5 days, over Gujarat State on 27th, 28th, 30th June and 1st July, provide mechanical support to banana & papaya plantations and staking to young plants and vegetables. Undertake propping in sugarcane.
- Sowing/Transplanting/Harvesting
- nursery sowing/direct sowing of rice; sowing of finger millet, maize, groundnut and cotton in Andhra Pradesh
 - sowing of groundnut, maize & tomato and planting of turmeric & coconut in Tamil Nadu
 - nursery sowing of rice in Telangana
 - sowing of maize, cotton and ginger; planting of areca nut in Coastal Karnataka; sowing of green gram, black gram, pigeon pea, soybean, cotton, maize, sorghum, horse gram niger, navane, castor and groundnut in Interior Karnataka
 - nursery sowing of *Sali* rice and sowing of pigeon pea, sesame, *kharif* maize in Assam
 - nursery sowing of lowland rice in Mizoram and Manipur
 - transplanting of low land and TRC/WRC rice; sowing of soybean in Nagaland
 - nursery sowing of Aman rice; transplanting of Aus rice; sowing of vegetable crops and planting of banana in Tripura
 - sowing of pigeon pea (in upland areas), okra and Shri Anna crops such as ragi, kodo, sava, china in Bihar
 - sowing of soybean in Jharkhand
 - nursery sowing of rice; sowing of cotton, pigeon pea, hybrid maize, okra, and yam in Odisha
 - nursery sowing of *kharif* rice in West Bengal
 - nursery sowing of rice; sowing of pigeon pea, soybean, groundnut, green gram and black gram in Chhattisgarh
 - harvesting of matured *Zaid* green gram and black gram; nursery sowing of rice and sowing of millets, sesamum and pigeon pea in Uttar Pradesh
 - nursery sowing of paddy; sowing of Bt cotton or desi cotton, groundnut, cucurbits and okra in Punjab
 - sowing of *kharif* pearl millet, sorghum, maize, green gram, moth bean and cluster bean in East Rajasthan
 - transplanting of rice and sowing of maize & beans in Jammu & Kashmir
- Pest and Disease
- In Kerala, remove the severely affected leaves and spray Propiconazole @ 1ml/litre of water to manage sigatoka leafspot disease in banana.
 - In Uttar Pradesh, spray Zinc sulphate 0.5% during clear weather in case of Khaira disease in paddy nursery.

Detailed Agromet Advisories

SOUTH INDIA [TAMIL NADU, TELANGANA, ANDHRA PRADESH, KARNATAKA, KERALA]

Realised Rainfall: Significant rainfall occurred in Alluri Sitharamraju, B. R. Ambedkar Konaseema, East Godavari, Eluru & West Godavari districts of Andhra Pradesh; in Adilabad, B. Kothagudem, J. Bhupalpally, Kumaram Bheem, Mancheri & Mulugu districts of Telangana; in Dakshina Kannada, Udupi, Uttara Kannada, Belgavi, Haveri, Chikkamagaluru, Kodagu, Hassan, Chitradurga, Shivamogga districts of Karnataka; in all the districts of Kerala except Thiruvananthapuram and in Coimbatore & Nilgiris districts of Tamil Nadu.

Advisories:

- As **rain/thundershowers** at many/most places likely over Coastal Andhra Pradesh & Yanam during next 24 hours, over Kerala & Mahe, Lakshadweep during next 72 hours, over Coastal Karnataka during next 4-5 days, and **Heavy to Very Heavy Rainfall** very likely at isolated places over Kerala & Mahe during next 48 hours; **Heavy Rainfall** very likely at isolated places over South Interior Karnataka, Telangana, Tamil Nadu Puducherry & Karaikal during next 24 hours, over Coastal Karnataka on 27th, 28th, 29th June and 1st July, over Tamil Nadu Puducherry & Karaikal on 28th, over Kerala & Mahe on 29th, over South Interior Karnataka on 1st July, postpone irrigation, intercultural operations and application of plant protection measures & fertilizers to the standing crops. Provide adequate drainage in standing crop fields to avoid waterlogging.

Tamilnadu

- In North Eastern Zone, undertake sowing of groundnut and planting of coconut.
- In Western Zone, undertake sowing of maize, tomato and planting of turmeric. Late season sugarcane setts may be planted to save ground and surface water.
- In Coastal Zone, weather is congenial for sucking pest in cotton; spray Imidacloprid 17.8 SL @ 100ml/ha (or) Azadirachtin 0.03% (300 ppm) @ 2500ml/ha.
- In Cauvery Delta Zone, continue nursery preparation of paddy. Undertake detashing and propping of five months old sugarcane. Provide support to banana with wooden poles to avoid lodging due to strong winds.
- In North Western Zone, continue sowing of groundnut. Banana growers are advised to follow propping to fruit-bearing plants with the help of bamboo pole / casuarina pole to avoid falling down due to increase of wind speed.
- In High-altitude Hilly Zone, provide drainage facility in carrot, turnip, radish, garlic, potato; postpone the intercultural / plant protection activities such as fertilizer and pesticide application.
- In Southern Zone, provide propping in sugarcane and adequate support to crops like banana, papaya and moringa to prevent lodging.

Kerala

- In Central Zone, postpone land preparation and nursery for virippu paddy (rainfed). Drainage facilities have to be ensured for banana and coconut.
- In Southern Zone, since heavy rainfall is expected, postpone the application of fertilizers, pesticides, and fungicides. Also, ensure that proper drainage arrangements are made in the fields.
- In High Altitude Zone, avoid water stagnation near the basin of cardamom plants. Provide drainage facilities. Provide good drainage and give strong supports banana plants.
- In Problem Area Zone, weather is congenial for sigatoka leafspot disease in banana; cut and remove the severely affected leaves and spray Propiconazole @ 1ml/litre of water.
- In Northern Zone, postpone nursery preparation/sowing of transplanted paddy. Provide good drainage to banana and coconut fields. Provide strong supports to banana plants.

Karnataka

- In Coastal Zone, in paddy seedling nurseries, ensure proper drainage and remove excess rainwater to prevent water stagnation. In transplanted paddy in the main field postpone the application of weedicides.
- In Hill Zone, undertake land preparation and sowing of maize, cotton and ginger during fair weather under sufficient soil moisture conditions. Undertake planting of healthy areca nut saplings. Provide drainage to remove the excess water from the maize field.
- In North Transition Zone, continue sowing of green gram, black gram, groundnut, maize, cotton and soybean where soil moisture condition is favourable.
- In North East Dry Zone, prepare dry seed bed nursery for transplanting of rice. Undertake sowing of kharif crops like green gram, pigeon pea, cotton, maize, sorghum and groundnut.
- In North Dry Zone, if sufficient moisture is available, start sowing of Kharif crops. In shallow black soil and red soils, undertake sowing of green gram, red gram, bajra, sesame, niger, navane, groundnut, horse gram and castor. In Medium deep and deep black soils, undertake sowing of green gram, red gram, bajra, *navane*, groundnut, castor, onion and chilli.

- In North East Transition Zone, undertake sowing of green gram, black gram, soybean, sorghum, pigeon pea and tomato. Provide protective irrigation for green gram, black gram and soybean which are in the seedling and vegetative stage.
- In Eastern Dry Zone, continue sowing of red gram, maize, groundnut and sunflower as sufficient soil moisture available in crop field. It is optimum time for sowing of tomato and chilli. Provide staking to tomato crop.
- In Southern Dry Zone, undertake nursery bed preparation of paddy with proper drainage. Undertake sowing of black gram, green gram, red gram, field bean, cowpea after ensuring optimum soil moisture. Provide propping/support to banana, tomato crops. Ensure proper drainage and avoid waterlogging in vegetables.
- In Southern Transition Zone, undertake nursery preparation of paddy, vegetables. Ideal time for planting coconut and areca nut saplings with proper drainage management. Prepare land and undertake sowing of maize at optimum soil moisture.
- In Central Dry Zone, prepare land for Kharif crops in areas where sufficient rainfall has been received recently. Moderate rainfall is favourable for sowing red gram and cowpea in upland fields.

Andhra Pradesh

- In North Coastal Zone, continue nursery sowing of rice. Undertake dry direct sowing of rice & maize. Drain out excess water from sesame and undertake earthing up in 120 days old crop.
- In Scarce Rainfall Zone, undertake pruning in mango, sweet orange orchards after harvesting. After receiving good amount of rainfall, take up sowing of green manure crops in between fruit trees.
- In High Altitude Tribal Zone, continue land preparation for raising rice nurseries; ensure proper drainage while preparing nursery beds. Present weather conditions are congenial for top rot incidence in sugarcane; based on severity of incidence, spray Carbendazim @ 1g or Mancozeb @ 3g per litre of water during clear weather.
- In Krishna Godavari Zone, withhold sowing of cotton in light soils till sufficient rainfall is received. Undertake intercultivation in sesame.
- In Southern Zone, undertake nursery sowing of rice after seed treatment. Undertake sowing of finger millet at optimum soil moisture condition. Undertake sowing of early Kharif groundnut with assured irrigation; grow 5–6 rows of sorghum or bajra as border crop to protect the main crop from vectors that transmit viral diseases.

Telangana

- In Telangana, if germination percentage is low in early-sown crops like maize, jowar, cotton, turmeric and red gram, it is essential to provide life-saving irrigation in fields where water is available; in areas where plant population is low, undertake gap filling or resowing and provide irrigation accordingly. Undertake raising of rice nurseries of medium duration (130-135 days) or short duration (120-125 days) varieties. It's optimum time to transplant long duration varieties with 25-30 days old seedlings.

Animal Husbandry:

- In Kerala, Keep the cattle shed and premises clean to avoid mosquito breeding. Avoid water logging near the cattle shed. The cow dung pit may be covered to prevent direct falling of rain.
- In Tamil Nadu, do not allow animals to graze during the afternoon hours near the western ghat foot hills. Check the stability of animal sheds against heavy wind.

NORTHEAST INDIA [ARUNACHAL PRADESH, ASSAM & MEGHALAYA, NMM&T]

Realised Rainfall: Significant rainfall occurred in all districts of Arunachal Pradesh; in all districts of Assam except Bajali, Baksa and Biswanath; in all districts of Meghalaya except North Garo Hills; in Aizwal, Champhai, Kolasib, Lawngtlai, Saiha, Serchhip districts of Mizoram; in all districts of Manipur; in Dimapur, Kephire, Kohima, Mokokchung, Wokha and Zunheboto districts of Nagaland and in Dhalai, Gomati, Khowai, Unakoti, North Tripura, South Tripura districts of Tripura.

Advisories:

- As **rain/thundershowers** at many/most places likely over Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Assam & Meghalaya during 29th June to 1st July, and **Heavy to Very Heavy Rainfall** very likely

at isolated places over Nagaland, Manipur, Mizoram and Tripura during next 24 hours; **Heavy Rainfall** very likely at isolated places over Assam & Meghalaya during next 5 days, over Arunachal Pradesh during next 4 days, over Nagaland, Manipur, Mizoram and Tripura on 28th, 29th June and 1st July, postpone irrigation, intercultural operations and application of plant protection measures & fertilizers to the standing crops. Provide adequate drainage in standing crop fields to avoid waterlogging.

Arunachal Pradesh

- Ensure proper drainage channels to avoid flooding or submergence of seedlings of rice. Strengthen bunds to prevent field erosion and seedling washout. Postpone fresh transplantation in lowland. Apply light dose of phosphorus and potash after rain to support root development and recovery. Undertake harvesting of matured vegetables (okra, chilli, beans, cucumber etc.). Harvest mature crop of soybean immediately.

Assam

- In Hill Zone, undertake land preparation and sowing of pigeon pea. During seedling to early vegetative stage of *Sali* rice, provide proper drainage around the nursery bed to prevent excess water from accumulating. Due to high temperature and humidity, there is chance of stem borer pests attack at sugarcane fields; to control, bury or burn the infested canes; spray Fipronil 5SC @ 75-100g per hectare when the weather is clear and dry.
- In Lower Brahmaputra Valley Zone, continue sowing of *Sali* rice; ensure proper drainage in the nursery bed; undertake main field preparation for transplanting rice seedlings. During fair weather conditions, top-dress sugarcane crop with 26 kg urea and 7.5 kg MOP per bigha of land followed by earthing up operation in.
- In Upper Brahmaputra Valley Zone, complete the sowing of long duration *Sali* rice varieties; continue main field preparation for transplanting of *Sali* rice. Continue planting of papaya seedlings in sandy loam upland areas free from water stagnation. Avoid water stagnation in sugarcane field; present weather is favorable for early shoot borer infestation; to control, bury or burn the infested canes and undertake proper earthing to reduce early shoot borer infestation.
- In Barak Valley Zone, undertake planting of one year old rooted cutting of Assam lemon in well drained loamy soil, free from water logging. Continue sowing *Sali* rice seeds; ensure proper drainage in the already-sown nursery beds; continue preparing main field for transplanting of *Sali* rice.
- In Central Brahmaputra Valley Zone, undertake transplanting of rice seedlings. Undertake land preparation and sowing of *kharif* sesame, *kharif* maize and pigeon pea. New jute plants are vulnerable to damping-off or root rot; provide proper drainage to prevent water logging.
- In North Bank Plain Zone, continue nursery sowing of rice during fair weather; undertake main field preparation for transplanting of rice. Complete the planting of banana suckers in the field by the end of this month. Proper sanitation along with disposal of the fallen fruits reduces the infestation of the sucking pests like Fruit Sucking Moth in citrus; baiting with Emamectin Benzoate or Flubendiamide mixed with molasses (1%) and fruit juice helps in controlling the pest.

Meghalaya

- Maintain proper drainage channels around the nursery beds of rice; undertake transplanting of rice in the main field; maintain a thin layer of 2-3 cm stagnant water in the field; avoid transplanting during heavy rainfall. Ensure proper drainage to prevent waterlogging and avoid standing water in the field of maize, ginger, French beans, cowpea/*lobia* and okra. Avoid water stagnation near cucumber plant bases to prevent collar rot and other root diseases; provide strong bamboo stakes or trellis support early to prevent vines from trailing on wet ground.

Mizoram

- Undertake nursery sowing of lowland rice; cover the nursery bed with perennial grass to conserve soil moisture for good germination and prevent seed displacement. Maintain appropriate drainage facilities in maize, tomato, chilli and orchards. To manage damping-off disease in tomato and chilli, especially after rainfall, carry out soil drenching using a mixture of Metalaxyl (8%) + Mancozeb (64%) @ 2.5g per litre of water.

Manipur

- Continue nursery bed preparation for sowing of low land *kharif* rice. Undertake field preparation and transplanting of rice. Provide adequate drainage in the pre kharif rice, finger millet, maize, black gram, soybean, ginger, turmeric, vegetables and orchard. Undertake propping in vegetables. Construct proper drainage to avoid water logging. Undertake harvesting of pre-kharif rice and transfer the harvested crop to safe and dry place.

Nagaland

- Undertake land preparation; carry out transplanting of low land rice and transplanting of TRC/WRC rice. Continue sowing of soybean. For the control of leaf curl disease in sesame, remove and destroy disease affected plants as well as the collateral host plants of chilli, tomato etc. Carry out weeding in *Jhum* rice during panicle formation stage.

Tripura

- In Tripura, maintain good drainage in the field of *Aus* rice; continue main field preparation and transplanting of *Aus* rice seedlings. Undertake sowing of vegetable crops and planting of banana. Continue sowing of *Aman* rice and ensure good drainage system in the nursery bed to drain out excess rain water.

Animal Husbandry

- Major diseases like Anthrax, Babesiosis, Black quarter, Enterotoxaemia, Lumpy skin, Peste des petits ruminants may attack livestock (cattle) animals. As preventive measures, ensure 100% vaccination with timely boosters for the above-mentioned diseases.
- Improve ventilation in poultry houses, provide dry bedding, and take preventive measures against fungal growth and diseases during wet conditions. Provide dry feed/fodder to the animals. Sick animals may be treated immediately.

Fishery

- Current hot and humid weather with occasional rainfall is favourable for fish farming. Maintain pond water depth at 1.5–2.0 meters and apply lime @ 200–250 kg/ha after rain. Ensure proper aeration using aerators or manual stirring to avoid oxygen shortage. Feed fish regularly, but reduce quantity on cloudy days. Use Potassium Permanganate or consult experts if disease symptoms appear.
- Prepare the fingerling rearing tanks and nurseries by cleaning them and applying agricultural lime @ 65-70g per sq. m for raising fingerlings. Apply cow dung @ 500g per sq m at least 15 days ahead of releasing fingerlings into the tanks.
- Select healthy, diseases free breeds of fishes from authentic sources after consulting with fishery officials. Before releasing, the fingerlings should be treated with Potassium permanganate @ 3-5%.

EAST INDIA [JHARKHAND, BIHAR, ODISHA, WEST BENGAL & SIKKIM, ANDAMAN & NICOBAR ISLANDS]

Realised Rainfall: Significant rainfall occurred in all the districts of Andaman & Nicobar Islands; in all the districts of West Bengal & Sikkim except Kolkata; in all districts of Bihar except Bhojpur, Gopalganj, Khagadia, Madhepura, Muzaffarpur, Saharsa, Saran & Sitamarhi; in all districts of Jharkhand and in most of the districts except Malkangiri, Nawapara districts of Odisha.

Advisories:

- As rain/thundershowers at many/most places likely over Andaman & Nicobar Islands, West Bengal & Sikkim, Jharkhand, Bihar, Odisha during next 4-5 days, and Heavy Rainfall very likely at isolated places over Odisha on 27th, 28th and 29th, over Jharkhand on 27th, 28th, 30th June and 1st July, over West Bengal & Sikkim on 27th June and 1st July, over Sub Himalayan West Bengal & Sikkim during 28th to 30th, postpone irrigation, intercultural operations and application of plant protection measures & fertilizers to the standing crops. Provide adequate drainage in standing crop fields to avoid waterlogging.
- As Thunderstorm accompanied with lightning & gusty winds(30-40kmph) likely at isolated places over Odisha, Andaman & Nicobar Islands during next 48 hours, over Jharkhand, Bihar, and Gangetic West Bengal during next 5 days, provide mechanical support to banana & papaya plantations and staking to young plants and vegetables. Undertake propping in sugarcane.

Bihar

- In North East Alluvial Zone, prepare the field for sowing of Shri Anna crops such as ragi, kodo, sava, china, etc. at optimum soil moisture in the field. This is optimum time to sow maize, cowpea and fodder sorghum.
- In North West Alluvial Plain, start land preparation for the sowing of Kharif maize. Complete the nursery sowing of medium-duration rice varieties; carry out weeding in the 10–12-day old paddy nursery. Carry out land preparation for sowing of pigeon pea in upland areas; apply of 20kg/ha Nitrogen, 45kg/ha Phosphorus and 20 kg/ha Potash and 20 kg Sulphur/ha during land preparation. Start sowing of okra.
- In South Bihar, postpone irrigation in standing crops and apply fertilizers and pesticides only when the sky is clear. Also strengthen the field bunds. In maize crop, ensure proper drainage in low-lying areas to prevent waterlogging. Start sowing of medium-duration rice varieties such as Kanak, Sita, Rajendra Shweta; for transplanting over one-hectare area, prepare a nursery in approximately 800 to 1000 square meters; treat the seeds with Bavastin @ 2g per kg of seed.

Jharkhand

- In Western Plateau Zone, optimum time for sowing of different Kharif crops is up to 30th June; ensure drainage before sowing any crop; adopt ridge and furrow method for sowing of all crops except rice. Maintain the bunds of transplanted rice field to store rain water and provide channels in vegetable fields for proper drainage. Construct channels around the nursery beds to maintain drainage. Undertake sowing soybean crop soon after the rains, light loamy soil with good drainage is best for the crop; before sowing, treat the seeds with rhizobium culture.

Odisha

- In Western Undulating Zone, continue sowing of rice during fair weather; seeds should be treated with Trichoderma @ 10g/kg of seeds 12-24 hrs prior to sowing in the nursery/main field to control seed and soil borne diseases. Undertake sowing of cotton, pigeon pea, hybrid maize during fair weather only. Prepare raised nursery bed for Kharif vegetables like brinjal, chilli, etc. for timely planting.
- In East & South Eastern Coastal Plain Zone, go for sowing of okra, maize, and yam during fair weather. Arrange good quality seeds for groundnut, green gram and black gram and pigeon pea; treat the seeds with Carbendazim 50% WP @ 2g/kg of seeds before sowing under fair weather conditions.
- In West Central Table Land Zone, due to persisting rainfall condition there is a risk of waterlogging in standing fruit and vegetable crops, which may lead to diseases like root rot, fusarium wilt, fruit rot, and stem rot. Ensure proper drainage and regularly monitor fields for disease symptoms. Prepare land and arrange quality seeds of Kharif rice, maize and pigeon pea from reliable sources; go for sowing of maize, pigeon pea after draining out excess water from the field. Utilize available moisture for nursery sowing/planting of rainy season vegetables.
- In North Eastern Ghat Zone, undertake sowing of rice; before sowing, treat rice seeds with Trichoderma powder @ 10g/kg, sourced from government-approved agencies. Use medium-duration rice varieties in medium lands. In upland areas, opt for non-paddy crops to avoid terminal drought. Practice intercropping in cereals with pulses or oilseeds. In clear weather, undertake sowing of pigeon pea, groundnut, and maize. For stem weevil management in banana gardens, install Cosmolure pheromone traps @ 10 per acre.
- In North Central Plateau Zone, undertake sowing of maize, green gram, and black gram in favourable weather condition; drain out excess water from field before sowing operation. Avoid pesticide or chemical sprays in vegetables in view of prevailing weather condition. Ensure drainage in rice nurseries and vegetable fields. Once weather clears, sow maize, papaya, banana, chilli, tomato, and bitter gourd; treat seeds with Carbendazim and Mancozeb @ 2g/kg before sowing.
- In Mid Central Table Land Zone, drain out excess water from the paddy nursery. It is the right time for nursery sowing of finger millet; use high-yielding varieties such as ivyasingh, AKP's, Godavari, Neelachal, etc.; apply 4 kg Urea and 35 kg DAP per acre during sowing for better crop establishment. Prepare fields and arrange quality seeds for pigeon pea, sunflower, sesame, and vegetables like okra, brinjal, and chilli.
- In North Eastern Coastal Plain Zone, ensure proper drainage in rice nurseries and vegetable fields. Prepare

nursery beds to utilize rainwater effectively for timely vegetable planting; avoid sowing in waterlogged conditions. Tie sugarcane leaves from four to five plants together to prevent lodging and carry out propping. To control early shot borer in sugarcane, spray Fipronil 5SC @ 400 ml/acre in clean weather condition.

- In North Western Plateau Zone, in clear weather, go for sowing of sesame (gingelly/til), pigeon pea (red gram/arhar), maize, and sweet potato; drain out excess water from the field before sowing operations to ensure proper germination and crop establishment.
- In South Eastern & Eastern Ghat High Land Zones, complete nursery preparation of rice on raised beds without delay; ensure proper drainage to prevent waterlogging. Undertake sowing of finger millet. Complete the sowing of maize by the end of June for higher yields. This is ideal time for planting turmeric and ginger rhizomes and their initial growth management. In brinjal, tomato, and chilli, high humidity and cloud cover may lead to pest and disease outbreaks; prepare raised nursery beds or planting beds to avoid waterlogging and support healthy plant growth..

West Bengal & Sikkim

Sub-Himalayan West Bengal

- In Hill Zone, undertake nursery sowing of kharif rice to ensure timely crop establishment; use temporary low tunnels, polythene sheets, or agro-shade nets supported by bamboo/sticks to protect nursery bed from heavy rainfall; maintain proper drainage channels to remove excess rain water from the nursery. Collect good quality seeds of soybean and start main field preparation; construct drainage channels at the time of field preparation; as splashing or washing away of seeds is possible due to rainfall, undertake sowing during fair weather. High soil moisture causes soft rot and bacterial wilt complex in ginger; maintain proper drainage facilities to prevent water logging and rotting of rhizomes.
- In Terai Zone, maintain proper drainage channels to avoid water stagnation in rice nursery; prepare seed bed in the upper land areas and avoid sowing in low lands; to avoid losses due to heavy rainfall, prepare seedbed in tray. Complete the harvesting of matured or near matured mango fruits. To control Yellow mosaic virus in okra, spray Imidacloprid @ 1.5ml per litre of water during clear weather; if necessary, provide support to okra and tomato plants with wooden sticks/PVC pipes.
- In Old Alluvial Zone, prepare kharif rice seed bed in the upland areas and avoid sowing in low lands to avoid losses due to heavy rainfall. Drain out excess water from rice, green gram, jute and brinjal to avoid water stagnation. Harvest all mature mango fruits and store in safe places.

Gangetic West Bengal

- In Coastal Saline Zone, drain out excess water from Aman paddy seed bed and start land preparation for main field. Start sowing chilli, brinjal, tomato and cucurbits in seed beds with ridge furrow system in upland areas. In ginger, avoid water stagnation at the base; to avoid rotting of rhizome spray a fungicide during clear weather.
- In Laterite and Red Soil Zone, collect good quality seeds of high-yielding rice varieties such as Swarna, Swarna Sub1, IR-36, Ratna, Uttar Sona, and Bangabandhu, and begin land preparation for the Kharif rice seedbed; select fertile land near a water source, preferably slightly elevated to avoid waterlogging; farmers who have already sown their nursery are advised to ensure proper drainage in the seedbed area to prevent waterlogging and seedling damage. In view of the recent heavy rainfall, take immediate measures to protect maturing crops from damage; harvest the matured pods promptly to prevent shattering and quality deterioration due to excess moisture.
- In New Alluvial Zone, collect good quality seeds and start seed bed preparation for kharif rice nursery; select elevated or well-drained areas for nursery beds. Monitor the sesame field for pod borer infestation; if observed, collect and destroy the affected plant parts. In jute, undertake plant protection spraying after cessation of rain to prevent stem rot. Undertake harvesting of matured groundnut pods..

Andaman & Nicobar Islands,

- In Andaman & Nicobar Islands, as the soil condition is conducive, apply FYM @ 12.5 t per hectare along with neem cake while preparing rice main field. Avoid stagnation of water in brinjal field and carry out foliar

application of 1 % vermiwash on rain free days for better growth and fruit set. For planting drumstick, cut one-year old stems; apply FYM @ 15 kg per pit.

Animal Husbandry

- In Bihar, vaccination is essential to protect animals from Hemorrhagic Septicemia (HS) and Foot-and-Mouth Disease (FMD). Ensure that all milch animals are vaccinated.
- In Odisha, vaccinate animals against FMD, HS, and BQ without delay. Provide shelter during rain with dry fodder and clean water. Use 4–6 inch sand flooring for goats/sheep, stir every 15–20 days. Avoid overstocking and ensure regular mineral mixture with salt. Deworm now and repeat in monsoon; rotate grazing areas to reduce parasite load. For stomatitis, clean the mouth and apply 1% boro-glycerine. Ensure good ventilation with openings of 1–2 ft size at the top of side curtains. Prevent humidity and ammonia buildup to avoid coccidiosis and respiratory diseases. Maintain dry litter, clean sheds, and clear drainage. Use polythene curtains for unused walls and ensure 3–4 ft roof overhangs to stop rainwater entry. Deworm birds and vaccinate them against Ranikhet disease. Spray birds and sheds together to avoid re-infestation. Always treat during clear weather after feeding, and consult a vet in case of side effects.

Pisciculture:

- In Odisha, carp such as Rohu, Catla and Mrigal, which grow rapidly, should be stocked in a certain ratio of 4:3:3 to increase the benefits. Generally, a density of 5,000 fingerlings/ha is kept as a standard stocking. Groundnut oil cake and rice bran is given in same ratio @ 5% of the total biomass of stocking material. Cow dung, urea and super phosphate should be applied to increase pond quality. In 8-10 months, fishes attain their marketable size.

WEST INDIA [GOA, MAHARASHTRA, GUJARAT]

Realised rainfall: Significant rainfall occurred over Mumbai City, Mumbai Suburban, North Goa, South Goa, Palghar, Raigad, Ratnagiri, Sindhudurg, Dhule, Kolhapur, Nandurbar, Nasik, Pune, Sangli, Satara, Chandrapur, Gadchiroli, Wardha and Yeotmal districts of Maharashtra and in all districts of Gujarat except Patan, Botad and Devbhoomi Dwarka.

Advisories:

- As rain/thundershowers at many/most places likely over Vidarbha on 27th June and 1st July, over Gujarat State, Konkan & Goa during next 4-5 days, and Heavy to Very Heavy Rainfall with isolated Extremely Heavy Rainfall very likely at isolated places over Saurashtra & Kutch during next 24 hours; Heavy to Very Heavy Rainfall very likely at isolated places over Vidarbha during next 24 hours, over Gujarat Region, Madhya Maharashtra during next 5 days, over Konkan & Goa on 27th, 29th, 30th and 1st July; Heavy Rainfall very likely at isolated places over Konkan & Goa on 28th, over Saurashtra & Kutch on 29th, 30th June and 1st July, over Vidarbha 30th June and 1st July, postpone irrigation, intercultural operations and application of plant protection measures & fertilizers to the standing crops. Provide adequate drainage in standing crop fields to avoid waterlogging.
- As Thunderstorm accompanied with lightning & gusty winds(30-40kmph) likely at isolated places over Vidarbha during next 24 hours, over Gujarat State on 27th, 28th, 30th June and 1st July, provide mechanical support to banana & papaya plantations and staking to young plants and vegetables. Undertake propping in sugarcane.

Maharashtra

- In Konkan, in view of heavy/ heavy to very heavy rainfall at isolated places, make arrangements to drain out excess water from rice and finger millet nurseries, groundnut, vegetables and orchards. Provide mechanical support to newly planted vegetables and orchards. Undertake transplanting of rice in Sindhudurg district. Undertake intercultural operations and apply second dose of fertilizer 1 kg of urea per guntha to 15 days old finger millet nurseries during low intensity of rain.
- In Madhya Maharashtra, in view of heavy / heavy to very heavy rainfall at isolated places over ghat areas of Pune, Kolhapur and Satara district, make arrangements to drain out excess water from rice nurseries and banana plantation. Provide mechanical support to orchards and vegetables. Continue nursery sowing of rice

during clear weather. Undertake re-sowing of rice nursery using Rahu method. Undertake sowing of *kharif* crops like cotton, soybean, green gram, black gram, pigeon pea, maize, sunflower, pearl millet, finger millet and groundnut under vapsa condition.

- In Marathwada, as the blocks in Marathwada region (Chatrapati Sambhajnagar district : Kannad, Khulatabad, Sillod & Soegaon talukas; Jalna district : Jafrabad & Bhokaradhan taluka; Nanded district : Nanded, Biloli, Hadgaon, Kinwat, Mudkhed, Himayatnagar & Mahur talukas; Hingoli district: Hingoli, Kalamnuri & Basmat talukas) received sufficient rainfall (75-100 mm), continue sowing of soybean, pearl millet, pigeon pea, cotton, groundnut, green gram and black gram at vapsa condition. In rest of the blocks, it is advised to undertake sowing only after receipt of sufficient rainfall (75-100 mm). If water stress is observed in already sown pigeon pea, green gram, black gram, cotton and maize crop, undertake intercultural operations and apply irrigation with the help of micro irrigation system as per availability of water.
- In Vidarbha, in view of realized rainfall during last 2 to 3 days and expected thunderstorm accompanied with lightning and light to moderate rainfall at isolated/few places, the blocks where sufficient rainfall (75-100 mm) has been received, undertake sowing of *kharif* crops like soybean, cotton, pigeon pea, black gram, green gram, sorghum etc. at vapsa condition during clear weather. In view of heavy to very heavy rainfall at isolated in Akola, Amravati, Buldhana and Washim districts, make arrangements for drainage of excess water from vegetable nurseries and orchards. Provide mechanical support to newly planted orchards and vegetables to prevent them from lodging during gusty winds. Continue nursery sowing of *kharif* rice and sowing of *kharif* crops like soybean, cotton, pigeon pea at *vapsa* condition during clear weather, where sufficient rainfall (75-100 mm) has been received.

Gujarat

- In Middle Gujarat Zone, postpone sowing of rice nursery and sowing of groundnut, pearl millet, sorghum, pigeon pea, green gram, and black gram. Carry out sowing of cotton at vapsa conditions during rain-free period. Undertake planting of banana during fair weather.
- In Bhal and Coastal Zone, postpone sowing of rice nursery and sowing of groundnut, pearl millet, sorghum, pigeon pea, green gram, black gram and cotton. Make arrangement to remove excess rain water from the already sown fields/nurseries.
- In North West Zone, carry out field preparation for sowing of cotton and groundnut.
- In North Gujarat Zone, make arrangement to remove excess rain water from the already sown fields/nurseries.
- In South Saurashtra Zone, after receipt of sufficient rainfall, undertake sowing of groundnut, cotton and soybean at *wapsa* condition; apply pre-emergence herbicides after sowing.
- In South Gujarat Zone, prop the sugarcane with strong bamboo or tie the leaves together in a clump to protect against wind and heavy rain. Postpone chemical and fertilizer application. Drain out excess water from the already-sown crop fields and nurseries.
- In South Gujarat Heavy Rainfall Zone, drain out excess rain water from sugarcane, vegetable fields and rice, vegetable nurseries. Prop the sugarcane with strong bamboo or tie the leaves together in a clump to protect against wind and heavy rain.
- In North Saurashtra Zone, drain out excess rain water from low lying fields. Continue sowing of groundnut, pearl millet, sorghum, pigeon pea, green gram, black gram and sesame after the current spell of heavy rainfall. Carry out sowing of cotton at vapsa condition; adopt inter crops like sesame, groundnut, soybean, pulses and maize in cotton crop for risk management under rainfed & partial irrigation.

Animal Husbandry

- In Gujarat, give daily 30 to 40g mineral mixture to animals. Animal shelter should be well ventilated. Good quality dry roughage with 15-20 kg green fodder provided to the animals, only after chaffing. Vaccinate animals against outbreaks of diseases like Foot & Mouth disease (FMD), Hemorrhagic Septicemia (HS) and Black quarter (BQ) during onset of monsoon.

CENTRAL INDIA [M.P., CHHATTISGARH]

Realised Rainfall: Significant rainfall occurred in all districts of Madhya Pradesh except Shajipur and in all

districts of Chhattisgarh except Balod, Bemetara, Durg, Kabirdham, Khairagarh Chh Gandai, Mungeli, Raipur, Rajnandgaon and Sakti.

Advisories:

- As rain/thundershowers at many/most places likely over Madhya Pradesh, Chhattisgarh during next 4-5 days and Heavy to Very Heavy Rainfall very likely at isolated places over Madhya Pradesh on 27th and 1st July; Heavy Rainfall very likely at isolated places over Chhattisgarh during next 4 days, over Madhya Pradesh during 28th to 30th June, postpone irrigation, intercultural operations and application of plant protection measures & fertilizers to the standing crops. Provide adequate drainage in standing crop fields to avoid waterlogging.
- As Thunderstorm accompanied with lightning & gusty winds(30-40kmph) likely at isolated places over West Madhya Pradesh during next 48 hours, provide mechanical support to banana & papaya plantations and staking to young plants and vegetables. Undertake propping in sugarcane.

Madhya Pradesh

- In Kymore plateau & Satpura Hill Zone; harvest matured maize during clear weather to avoid damage and ensure proper grain drying under dry conditions. Undertake field preparation for nursery sowing of rice.
- In Satpura Plateau Zone, to prevent damage due to heavy rainfall, cover the rice nursery seedlings with green net or any other medium. Postpone the application of insecticides and fungicides till clear weather conditions prevail. Start preparation of nursery for early cauliflower, tomato, chili and brinjal; nursery bed must be 5-6-inch height and 3 feet width; sow the seeds after treatment with Captan @ 2.0g/kg of seeds.
- In the Nimar Valley Zone, undertake sowing of pigeon pea during fair weather; use varieties like TJT-501, JKM-189, IPA 15-6, etc.; before sowing, treat the seeds with crop specific Rhizobium culture and Phosphate Solubilizing bacteria. Use basal dose of 20 kg Urea + 30 kg DAP + 20 kg Potash/acre in cotton of at 30 days with using ring of column method during clear weather conditions.
- In Jhabua Hills Zone, undertake sowing of crops after the period of heavy rainfall has passed and the field becomes suitable for sowing; arrange improved seed varieties, such as DCH-32 and Bt II cotton; before sowing, treat the seeds with 2.0g Carbendazim per kg of seed, follow the recommended spacing of 90–120 cm between rows and 90 cm between plants. Stop irrigation to summer cucurbit crops, watermelon, muskmelon, ladyfinger, cluster beans, chili, tomato, brinjal etc. in view of forecasted moderate to heavy rainfall; open drainage channels in vegetable field to drain out excess rain water.
- In Gird Zone, harvest mature crop of maize during clear weather and keep it on the safe threshing floor. Prepare the fields for sowing pearl millet and soybean; treat the seed before sowing. Due to the prevailing weather conditions, there may be possibility of leaf curl (*Churramurra* disease) in chili; to control, apply Thiamethoxam 25 W.G. @100g in 500 to 600 liters of water per hectare in clear weather.
- In Bundelkhand Zone, undertake sowing of soybean, maize, green gram, black gram, sesame, and groundnut during fair weather; before sowing, treat the seeds with Thiram @ 2g + Carbendazim @ 1g per kg of seeds. Harvest the ripe mango fruits to prevent its quality deterioration by rain.
- In Central Narmada Valley Zone, considering the possibility of moderate to heavy rainfall, make proper drainage channels in sugarcane and vegetable crops. Undertake nursery sowing of paddy during fair weather; treat the seeds with Carbendazim or Thiram @ 2g/kg of seed after soaking the seeds for 24 hours. Complete sowing of Kharif nursery of brinjal, chili and okra if weather conditions are favourable.
- In Vindhya Plateau Zone, undertake sowing of Kharif crops such as soybean and maize in fair weather; sow improved varieties of soybean using ridge-bed-furrow method and BBF method for better germination and drainage; sow improved varieties of maize in row. Before sowing pulses crops, seed treatment may be done with 2g Thiram + 1g Carbendazim + 3g Rhizobium culture + 2g PSB culture per Kg of seeds. In view of the possibility of heavy rainfall, make proper drainage arrangements in the fields.
- In Malwa Plateau Zone, use of plastic sheets to protect stored produce from rain. Start sowing of soybean after proper seed treatment during fair weather conditions.

Chhattisgarh

- In North Hill Zone, postpone irrigation and fertilizer application in standing crops and harvest matured crops

to minimize the impacts from rainfall. Make arrangements for drainage of excess water from paddy fields planted in row or line to line method. Provide mechanical support to orchards and other tall/weak crops with stakes or bamboo to prevent lodging or breakage. Undertake sowing of pigeon pea, green gram, and black gram during fair weather at adequate soil moisture condition; before sowing, treat pigeon pea seeds with Rhizobium and Phosphate Solubilizing Bacteria (PSB).

- In Bastar Plateau Zone, before transplanting or sowing paddy, treat the self-produced seeds with 17% salt solution; certified or foundation seeds must be treated with the fungicide provided in the packet. Choose progressive varieties of pulse crops and prepare the land for sowing. Prepare the field and arrange for seeds for cultivation of rainy season vegetable crops such as tomato, chili, ladyfinger, brinjal, pumpkin, bottle-gourd, radish and cauliflower.
- In Chhattisgarh Plain Zone, prior to the sowing of Kharif crops, deep plough the soil with an MB plough and cover it with polythene to eliminate weeds, diseases borne from the soil and insect eggs. Before sowing of paddy, treat the seeds with 17% salt solution. Start preparation for line sowing of groundnut at seed rate 120-140 kg/ha; treat the seeds with Trichoderma 5-10g, Rhizobium culture 5-10g and P.S.B. @ 5-10g per kg of seed.

Animal Husbandry

- In Madhya Pradesh, provide 50g iodized salt and 50-100g mineral mixture daily with animal feed/fodder to keep animals healthy.
- In Chhattisgarh, for higher milk production, give 25-30 kg green fodder per day in the ratio of 3:1 green and dry fodder. Cattle (milch and non milch) must be fed with mineral mixture @ 25-30g per day.

NORTH INDIA [JAMMU & KASHMIR (UTs), HIMACHAL PRADESH, UTTARAKHAND, PUNJAB, HARYANA, DELHI, UTTAR PRADESH & RAJASTHAN]

Realised Rainfall: Significant rainfall occurred over Kangra, Mandi and Sirmour districts of Himachal Pradesh; over Jammu, Kathua, Poonch, Rajouri, Reasi, Samba and Udhampur districts of Jammu & Kashmir and in most of the districts of Uttarakhand except Almora, Pauri Garhwal, Tehri Garhwal and Uttarkashi; in Ludhiana, Pathankot districts of Punjab; in Karnal, Kurukshetra, Rewari, Yamunanagar districts of Haryana; in Central Delhi, New Delhi, North East Delhi, West Delhi districts of Delhi and in all districts of Rajasthan except Alwar, Jhunjhunu, Barmer, Bikaner, Churu, Jaisalmer, Hanumangarh and Sri Ganganagar; in all districts of east Uttar Pradesh except Ambedkar Nagar, Azamgarh, Ballia, Chandauli, Deoria, Farrukhabad, Fatehpur, Gazipur, Jaunpur, Kushinagar, Rai-bareilly & Sultanpur and in Agra, Bareilly, Bijnor, Etah, Etawah, Firozabad, Hamirpur, Hathras, Jalaun, Jhansi, Kasganj, Lalitpur, Mahoba, Mainpuri, Meerut, Muzaffarnagar, Saharanpur, Sambhal and Shahjahanpur districts of west Uttar Pradesh.

Advisories:

- As rain/thundershowers at many/most places likely over Jammu & Kashmir during next 24 hours, over Rajasthan during next 48 hours, over East Uttar Pradesh on 28th, over Himachal Pradesh, Uttarakhand, Haryana Chandigarh & Delhi during next 4-5 days, over Punjab, East Rajasthan, Uttar Pradesh during 29th June to 1st July, and Heavy to Very Heavy Rainfall very likely at isolated places over East Rajasthan during next 24 hours, over Uttarakhand during next 5 days; Heavy Rainfall very likely at isolated places over West Rajasthan during next 24 hours, over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad during next 3 days, over Himachal Pradesh on 27th, 28th, 30th June and 1st July, over Haryana, Chandigarh & Delhi on 27th, 28th June and 1st July, over Rajasthan on 28th and 29th, over Punjab and Uttar Pradesh on 28th and 30th, over East Rajasthan 30th June and 1st July, postpone irrigation, intercultural operations and application of plant protection measures & fertilizers to the standing crops. Provide adequate drainage in standing crop fields to avoid waterlogging.
- As Thunderstorm accompanied with lightning & gusty winds (40-50 kmph) likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 30th June and 1st July; Thunderstorm accompanied with lightning & gusty winds(30-40kmph) likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad during next 3 days, over Rajasthan during next 5 days, provide mechanical support to banana & papaya plantations and staking to young plants and vegetables. Undertake propping in sugarcane.

Himachal Pradesh

- In High Hill Temperate Zone, carry out weeding in barley. Maintain drainage channels in the fields and postpone application to fertilizers and spraying of pesticides.
- In Mid Hills Sub Humid Zone, provide timely support to tomato plants through staking or other suitable methods during the early growth stage to prevent lodging, enhance air circulation, and improve both fruit yield and quality. Remove lower leaves up to 10–15 cm from ground level to reduce the risk of soil-borne diseases. Provide support to the cucumber vines and make proper drainage channels in the fields.
- In Sub Montane and Low Hills Sub Tropical Zone, continue land preparation for transplanting of rice. Create drainage channels in vegetables like cucumber, summer squash, bitter gourd and bottle gourd to prevent waterlogging. Shift the harvested vegetable produce in safe place or cover it with tarpaulin or plastic sheets.
- In High Hills Sub Temperate Wet Zone, carry out hoeing and weeding in finger millet. Provide adequate support (staking) for cucurbits with large leaves or heavy fruits to prevent them from falling or breaking under the weight of water or due to strong wind as well as to protect from soil-borne diseases. Maintain adequate drainage channels to avoid water stagnation in the vegetable fields. Avoid irrigation and any kind of chemical spray in view of heavy rainfall. For delicate plants, consider using row covers, netting, or plastic sheets to shield them from direct rainfall while allowing air circulation. Ensure proper drainage channels in maize and millets to prevent waterlogging, which suffocates crop roots. .

UT of Jammu & Kashmir

- In Sub Tropical Zone, clean bunds of the main rice field. Strengthen the bunds for in situ storage of rain water and utilize the same for puddling. Do not allow rain water to stagnate in maize field. Undertake transplanting of tomato, brinjal, chilli and okra during fair weather.
- In Intermediate Zone, undertake sowing of maize during clear weather. Continue transplanting of rice seedlings. Carry out weeding in summer vegetables like tomatoes, brinjal, chilli & okra.
- In Valley Temperate Zone, carry out intercultural operations in maize where the crop has reached at knee high stage. Continue sowing of Pole type beans. Continue sowing of kharif fodder crops viz. fodder maize, sorghum and bajra. Carry out hand pollination in bottle gourd to improve its yield. .

Uttarakhand

- In Bhabar and Tarai Zone, undertake transplanting of rice. In view of rainfall forecast, postpone sowing of groundnut and maize. Postpone earthing up operation in sugarcane. Keep the harvested pumpkins and cucurbits in safe place. Undertake harvesting of matured tomato fruits and keep the harvested produce in safe place.
- In Hill Zone, maintain proper drainage channels in finger millets. Complete the transplanting of rice and sowing of black gram at the earliest. Undertake sowing of kidney beans in mid to high hills during fair weather. Undertake harvesting of matured potato and keep the harvested produce in safe place. Maintain proper drainage channels to avoid waterlogging in ginger. Undertake picking of matured tomato fruits; maintain proper drainage channels in the field.
- In Sub Humid Sub Tropic Zone, in view of rainfall forecast, maintain proper drainage channels to drain out excess water from barnyard millet and finger millet. Use wind breaks and shelter belts to protect tomato plants from strong winds; withhold irrigation.

Punjab

- In Western Zone of Punjab, make all necessary arrangements to minimize the rain water losses from field kept for paddy transplanting. Cotton crop is highly sensitive to standing water during early growth stages; drain out the excess water from the cotton fields. Drain out excess rain water from the orchards as it may cause severe damage to fruit plants particularly citrus and papaya.
- In Western Plain Zone of Punjab, continue nursery sowing of paddy, make all necessary arrangements to minimize the rain water losses from field for paddy transplanting. Continue sowing of okra and recommended varieties/hybrids of cotton including Bt cotton or desi cotton. Under prevailing weather conditions, mites may cause severe damage to sugarcane, remove the baru weed growing around the sugarcane fields.

- In Undulating Plain Zone of Punjab, undertake transplanting of rice. Up to end of June is the optimum time of sowing of maize.
- In Sub Montane Undulating Plain Zone of Punjab, carry out transplanting of rice. Undertake sowing of irrigated maize and soybean under optimum soil moisture conditions.
- In Central Plain Zone of Punjab, undertake transplanting of rice. It is optimum time for sowing of Bt cotton or desi cotton with good drainage facilities in the field. Undertake sowing of groundnut under rainfed conditions. Undertake sowing of okra and cucurbits such as pumpkin, bottle gourd, bitter gourd, sponge gourd, ash gourd, round gourd and *wanga*.

Haryana

- In Haryana, undertake preparation of paddy nurseries during fair weather. Avoid irrigation to cotton crop and make drainage system to drain out of excess water.

Delhi

- In Delhi, continue nursery preparation for paddy, early cauliflower, tomato, chilli and brinjal. Monitor the paddy nursery for the attack of bakanae disease; if symptom appear, spray Carbendazim @ 2.0g per litre of water. Undertake transplanting of brinjal, chilli and early cauliflower if seedlings are ready. Undertake sowing of rainy season cucurbits such as bottle gourd, bitter gourd, pumpkin. Prepare field for sowing maize. Proper drainage should be maintained in pulses crop and vegetable nurseries.

Uttar Pradesh

- In Western Plain Zone, make scaffolding in bottle gourd. Provide proper arrangements for drainage of water in all vegetables. Spray Zinc sulphate 0.5% during clear weather in case of Khaira disease in paddy nursery. Harvest the summer crops; store the harvested crops in a safe place.
- In Central Zone, make proper arrangement for drainage of excess rain water from paddy nursery. Postpone sowing of maize and sesame till the weather clears. Harvest the summer crops and store the harvested crops in a safe place. Raise nurseries of early maturing paddy varieties. Before transplanting paddy seedlings, strengthen the bunds of the fields so that rainwater remains in the fields. Considering the possibility of rain, keep the harvested maize crop in a safe place. Apply pheromone trap @ 4-5 per acre to protect the pumpkin fruits for the management of fruit borer pest.
- In Bundelkhand Zone, start sowing of millets, sesamum, pigeon pea at sufficient moisture condition during fair weather. Undertake nursery sowing of paddy under favourable weather conditions; use suitable high yielding variety. This is the suitable time for establishment of new orchards of mango, guava, litchi, *aonla*, jackfruit, lemon, *jamun*, *ber*, banana, papaya, etc. Strengthen the bunds of the fields for transplanting paddy seedlings so that rainwater remains in the field.
- In Eastern Plain Zone, drain excess water from paddy nurseries and vegetable plots; withhold irrigation and chemical application during the spells of moderate to heavy rainfall; strengthen bunds to prevent runoff; maintain clean field drains, and store harvested grains and produce in dry, covered, elevated places to prevent damage. To minimize losses, stake or support tall crops, prune dead branches to reduce the risk of breakage, reinforce protective structures, and, if feasible, harvest mature fruits and vegetables early.
Sow the early recommended variety of pigeon pea, Barnyard millet, *Sawan* and *Kodo* during fair weather. Arrange seeds of recommended complex varieties of sorghum. For planting new banana orchards, plant tissue cultured disease resistant G9 variety. Before transplanting paddy fields, plough the field 1-2 times using a soil turning plough so that rain water is conserved and weeds are destroyed.

Rajasthan

- In Flood Prone Eastern Plain Zone, undertake land preparation for sowing pearl millet. Arrange seeds, fertilizers, and agrochemicals in advance to ensure timely sowing of Kharif crops like sorghum, maize, green gram, *moth* bean, and cluster bean.
- In Semi-Arid Eastern Plain Zone, complete the sowing of irrigated groundnut during fair weather. Arrange seeds, fertilizers & chemicals in advance to facilitate timely sowing of kharif crops like pearl millet, sorghum, maize & cluster bean.

- In Southeastern Humid Plain Zone, last week of June and first week of July are suitable for transplanting 25-30 days old rice seedlings. Sow improved varieties of soybean and maize during fair weather; maize should be sown on ridges with drains to avoid waterlogging to help the plants grow well. During fair weather, undertake nursery preparation for early cauliflower, tomato, chilli and brinjal; nursery bed must be 5-6 inch height and 3 feet width. Undertake sowing improved varieties of rainy season vegetables lady's finger, *loki*, *tinda*, *kahu*, bitter gourd, cucumber, *guarphali*, *chaula*, etc. during fair weather. Arrange seeds for sowing of Kharif crops like cow pea, green gram, pearl millet, sorghum and cluster beans.
- In Sub Humid Southern Plain and Aravali Hill Zone, procure improved quality seeds of maize, groundnut, and pulses from trusted sources for the upcoming Kharif season. Undertake preparation of nursery for tomato. Do regular hoeing and weeding in cotton. Continue sowing of groundnut during fair weather.
- In Hyper Arid Partially Irrigated Western Plain Zone, it is optimum time for sowing groundnut. Second fortnight of June is optimum time for sowing green gram. Prepare field for sowing rainfed pearl millet after receipt of sufficient rainfall. Picking of cucurbits should be done at proper stage; changes in color of fruit, drying of stalk near fruit, thumping sound etc are important symptoms of ripening of fruits.
- In Arid Western Plain Zone, plough the field once before sowing, harrow 2–3 times, and get seeds, fertilizers, and chemicals ready early for timely Kharif sowing. Arrange seeds of improved varieties of pearl millet & green gram. The optimum time for sowing of cluster bean crop is up to mid-July; arrange certified seeds; treat the seeds before sowing.
- In Southern Humid Plain Zone, complete the sowing of cotton in prepared irrigated fields; timely sowing of cotton can produce higher yields compared to late sowing. Undertake nursery preparation for rice for the upcoming kharif season. If sufficient moisture is available in the field, complete the sowing of maize & soybean. Complete the harvesting of mango fruits and okra; keep them in a safe place.
- In Irrigated Northwestern Plain Zone, undertake sowing of green gram if rain has realized and water is available. Prepare field for sowing guar. Keep the cotton field free from weeds, undertake weeding after first irrigation and maintain optimum plant population.
- In Transitional Plain Zone of Inland Drainage, perform light ploughing in the fallow fields, so that maximum rain water can be conserved in the soil which will also help in removing the salts accumulated in root zone due to irrigations provided during rabi season. To get the benefit of monsoon rains, prepare for sowing of kharif crops, particularly rainfed pearl millet, cluster bean, mung bean, moth bean, etc. Undertake sowing of cucurbits in rainy season; it is suitable time to sow recommended hybrid varieties.

Fishery

- In Sub Montane and Low Hills Sub Tropical Zone of Himachal Pradesh, reinforce pond bunds and prevent rainwater runoff. Ensure proper inlet and outlet systems to avoid overflow or contamination from surrounding runoff. Ensure that ponds are well-cleaned and de-silted before fresh stocking. Feed during cooler parts of the day, i.e., early morning and late afternoon.
- In Sub Tropical Zone of Jammu & Kashmir, check the outlet and water level of the pond in order to avoid the escape of fish live-stock from ponds. Apply screen to the outlet.

The Agromet Products in this Bulletin are generated by Agrimet Division, weather forecast issued by NWFC, New Delhi and Agromet Advisories are prepared based on the DAAS Bulletins issued by different Agro-meteorological Field Units (AMFUs).