



National Agromet Advisory Service Bulletin

Friday 07th August 2020

(For the period 07th to 11th August 2020)



Issued by

India Meteorological Department

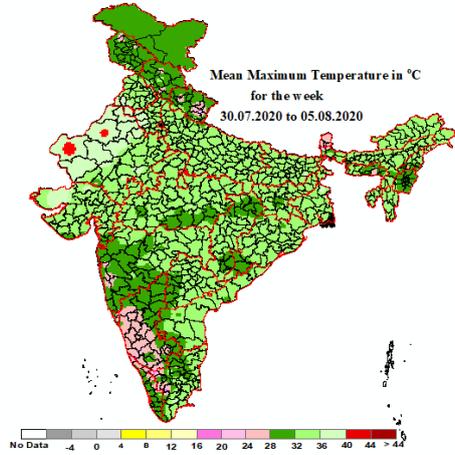
Weblink For

District AAS Bulletin: <http://www.imdagrimet.gov.in/node/3545>

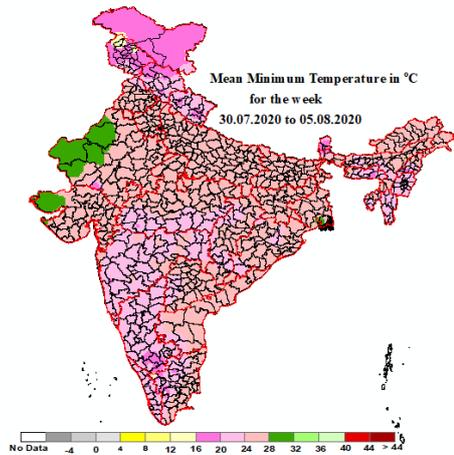
State Composite AAS Bulletin: <http://www.imdagrimet.gov.in/node/3544>

spatial distribution of weather parameters for the week ending on 05.08.2020

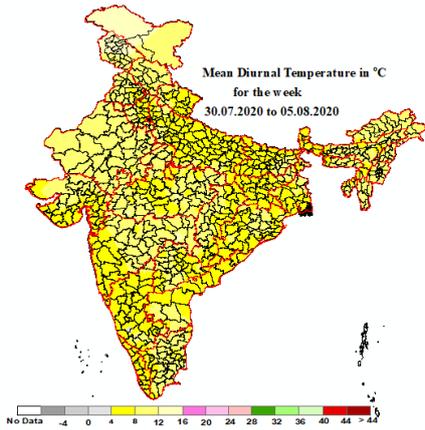
Mean Maximum Temperature (°C) for the week ending on 05.08.2020



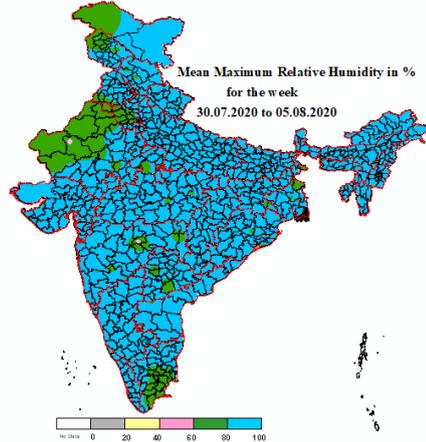
Mean Minimum Temperature (°C) for the week ending on 05.08.2020



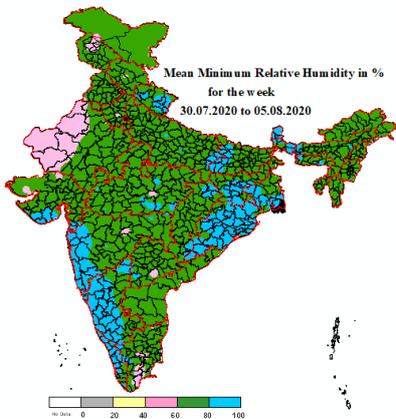
Mean Diurnal Temperature Variation (°C) for the week ending on 05.08.2020



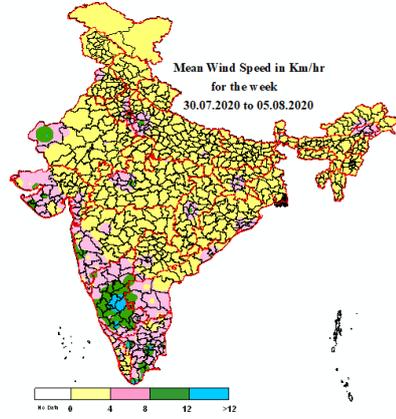
Mean Maximum Relative Humidity (%) for the week ending on 05.08.2020



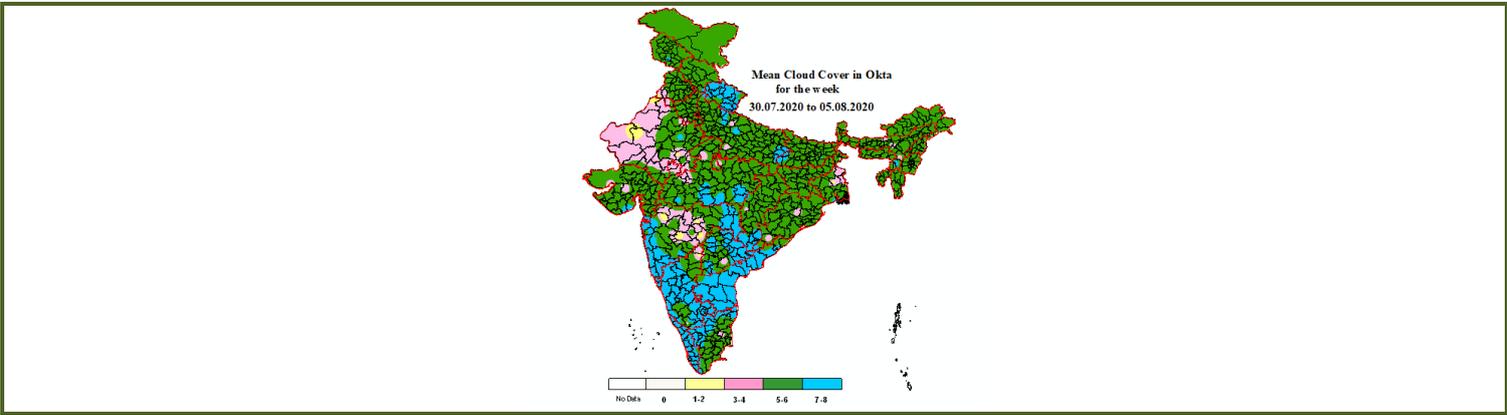
Mean Minimum Relative Humidity (%) for the week ending on 05.08.2020



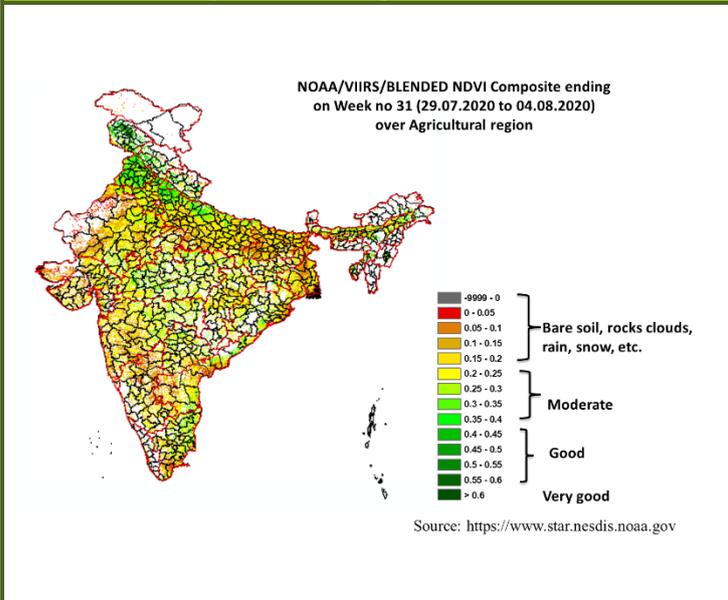
Mean Wind Speed (km/hr) for the week ending on 05.08.2020



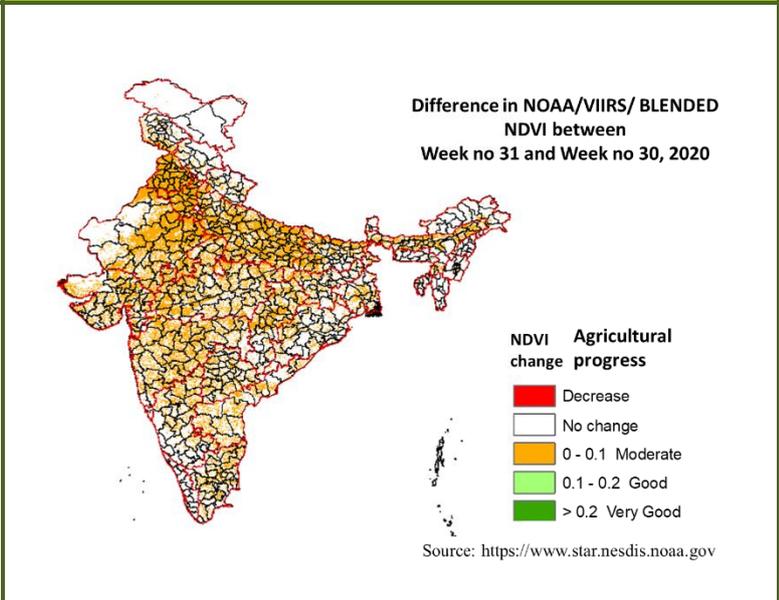
Mean Cloud Cover (okta) for the week ending on 05.08.2020



NOAA/VIIRS/BLENDED NDVI composite for the week number 31 (29.07.2020 to 04.08.2020) over Agricultural regions of India



Difference in NOAA/VIIRS/BLENDED NDVI between week number 31, 2020 and week number 30, 2020

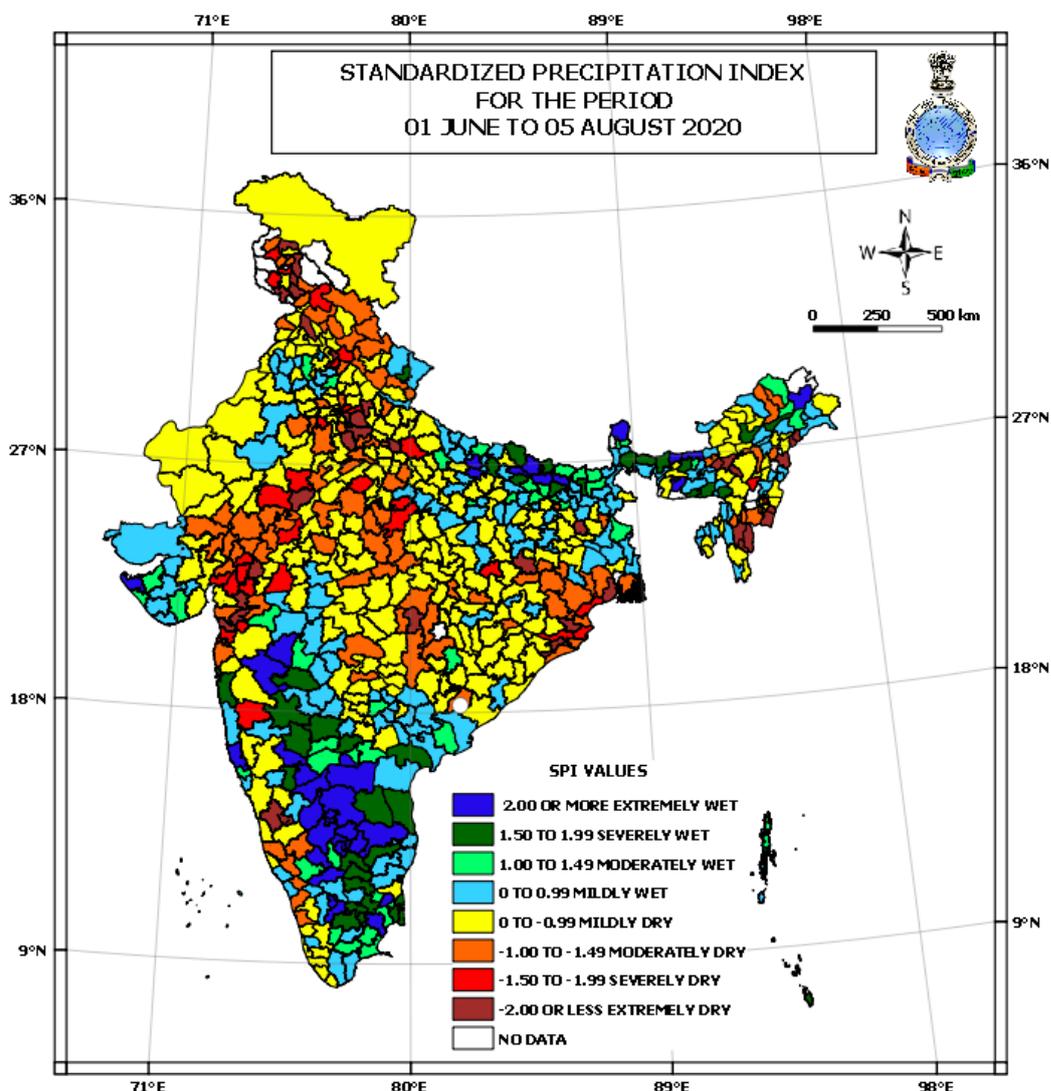


Agricultural vigour was good at most parts of valley region of Jammu & Kashmir (UT); at a few places over Himachal Pradesh, Uttarakhand & Jammu Division and isolated places of Punjab, Uttar Pradesh, North Eastern states, Coastal Andhra Pradesh & Kerala.

Good difference in agricultural vigour was observed over isolated places of Jammu & Kashmir (UT), Punjab, Himachal Pradesh, Uttarakhand, Uttar Pradesh, Madhya Pradesh, Northern Chhattisgarh, Jharkhand, West Bengal & Sikkim, North Eastern states and Konkan.

**Standardised Precipitation Index
for the period 1st June to 5th August 2020**

**MINISTRY OF EARTH SCIENCES
INDIA METEOROLOGICAL DEPARTMENT
HYDROMET SECTION, CRS PUNE**



- Extremely/ Severely wet conditions exist in Guntur, Nellore, Anantapur, Chittoor, Cuddapah, Kurnool districts of Andhra Pradesh; Lower Dibang Valley, Papumpara districts of Arunachal Pradesh; Barpeta, Kokrajhar, Dhemaji, Baksa, Chirang districts of Assam; East Champaran, West Champaran, Darbhanga, Gopalganj, Madhepura, Muzaffarpur, Samastipur, Sitamarhi, Sheohar, Siwan districts of Bihar; Devbhumi Dwarka district of Gujarat; Bagalkote, Bijapur, Gadag, Gulbarga, Koppal, Bangalore Rural, Bangalore Urban, Bellary, Chamarajanagar, Chitradurga, Kolar, Mandya, Tumkur, Chickballapur districts of Karnataka; Mumbai City, Sindhudurg, Mumbai Suburban, Ahmednagar, Sholapur, Aurangabad, Beed districts of Maharashtra; East Garo Hills, East Khasi Hills districts of Meghalaya; Dharmapuri, Dindigul, Karur, Nagapattinam, Pudukkottai, Salem, Trichy, Tiruvarur, Vellore, Krishnagiri, Ariyalur, Tirupur districts of Tamilnadu; Ambedkar Nagar, Basti, Gorakhpur districts of Uttar Pradesh; Jalpaiguri district of West Bengal; Nicobar district of Andaman & Nicobar Islands; North Sikkim district of Sikkim; Bageshwar district of Uttarakhand; Mahbubnagar, Jogulamba, Gadwal districts of Telangana.
- Extremely/Severely dry conditions exist in Tirap district of Arunachal Pradesh; Nagaon, Morigaon districts of Assam; Baroda, Valsad, Dangs, Panchmahal, Anand, Dahod, Narmada, Navsari, Tapi, Chhota Udepur, Mahisagar districts of Gujarat; Ambala, Rewari, Panchkula districts of Haryana; Chamba, Sirmaur districts of Himachal Pradesh; Anantnag, Baramula, Jammu, Udhampur, Srinagar, Ramban,

Bandipore, Kulgam, Rajouri districts of Jammu & Kashmir (UT); Shimoga district of Karnataka; Dhar, Gwalior, Mandasaur, Chhatarpur districts of West Madhya Pradesh; Satara, Gondia districts of Maharashtra; Chandel, Imphal East districts of Manipur; Aizwal, Champhai, Serchhip districts of Mizoram; Tuensang, Parem districts of Nagaland; Balasore, Cuttack, Jajpur, Kendrapara, Khurda districts of Odisha; Hoshiarpur district of Punjab; Bhilwara, Bundi, Tonk districts of Rajasthan; Daman districts of Union Territory; Farrukhabad, Hardoi, Aligarh, Bulandshahar, Gautam Budha Nagar, Ghaziabad, Jyotiba Phule Nagar, Mathura, Mahoba districts of Uttar Pradesh; East Midnapore district of West Bengal; Deoghar, Gumla districts of Jharkhand; Surguja district of Chhatisgarh.

- Moderately wet to moderately dry conditions were experienced in remaining districts of the country.

Weather Forecast for next 5 days valid upto 0830 hours of 12th August, 2020

- ◆ Meteorological sub-division wise detailed 5 days precipitation forecast is given in Table-1.
- ◆ No significant change in temperatures very likely over most parts of the country during next 3-4 days.

5 Day Rainfall Forecast (MID-DAY)

07-August-2020

Met-Sub-Division	07-Aug Today	08Aug Sat	09Aug Sun	10Aug Mon	11Aug Tue
1. Andaman & Nicobar Islands	WS	WS	WS	WS	WS
2. Arunachal Pradesh	FWS	WS	WS	WS	FWS
3. Assam & Meghalaya	WS	WS	WS	WS	WS
4. N. M. M. & T.	WS	WS	WS	WS	WS
5. S.H. West Bengal & Sikkim	WS	WS	WS	WS	WS
6. Gangetic West Bengal	WS	FWS	FWS	FWS	FWS
7. Odisha	SCT	FWS	WS	WS	WS
8. Jharkhand	FWS	WS	WS	WS	WS
9. Bihar	SCT	FWS	FWS	FWS	FWS
10. East Uttar Pradesh	SCT	FWS	WS	WS	WS
11. West Uttar Pradesh	SCT	FWS	WS	WS	WS
12. Uttarakhand	WS	WS	WS	WS	WS
13. Haryana, Chd & Delhi	ISOL	SCT	WS	WS	FWS
14. Punjab	ISOL	SCT	FWS	WS	FWS
15. Himachal Pradesh	FWS	WS	WS	WS	FWS
16. J & K and Ladakh	SCT	FWS	FWS	FWS	FWS
17. West Rajsthan	FWS	SCT	SCT	SCT	SCT
18. East Rajasthan	FWS	SCT	SCT	FWS	FWS
19. West Madhya Pradesh	SCT	SCT	FWS	FWS	FWS
20. East Madhya Pradesh	FWS	FWS	WS	WS	WS
21. Gujarat Region	WS	SCT	SCT	FWS	SCT
22. Saurashtra & Kutch	WS	SCT	SCT	SCT	SCT
23. Konkan & Goa	WS	WS	WS	WS	WS
24. Madhya Maharashtra	FWS	SCT	SCT	FWS	FWS
25. Marathawada	SCT	SCT	SCT	FWS	FWS
26. Vidharbha	SCT	FWS	WS	WS	WS
27. Chhattisgarh	FWS	FWS	WS	WS	WS
28. Coastal A. P. & Yanam	SCT	FWS	WS	WS	WS
29. Telangana	SCT	FWS	WS	WS	WS
30. Rayalaseema	ISOL	SCT	FWS	FWS	FWS
31. T.N.,Puducherry & Karaikal	ISOL	SCT	SCT	ISOL	ISOL
32. Coastal Karnataka	WS	WS	WS	WS	WS
33. North Interior Karnataka	FWS	SCT	SCT	FWS	FWS
34. South Interior Karnataka	FWS	WS	WS	WS	FWS
35. Kerala & Mahe	WS	WS	WS	WS	WS
36. Lakshadweep	WS	WS	WS	WS	WS

% Station Reporting Rainfall

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

Weather Warning during next five days:

◆ **07 August (Day 1):**

◆ **Heavy to very heavy rainfall** at a few places **with extremely heavy falls** at isolated places over Kerala & Mahe; **Heavy to very heavy rainfall with extremely heavy falls** at isolated places over Coastal Karnataka

and Tamilnadu, Puducherry & Karaikal (Hilly regions of Coimbatore, Nilgiri & Theni districts) ; **Heavy to very heavy rainfall** at isolated places over Gujarat State, Madhya Maharashtra (Ghat areas), South Interior Karnataka and Konkan & Goa; **heavy rainfall** at isolated places over Himachal Pradesh, Uttarakhand, Rajasthan, West Bengal & Sikkim, Andaman & Nicobar Islands, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.

♦ **Thunderstorm accompanied with lightning & gusty wind (speed 30-40 kmph)** very likely at isolated places over West Rajasthan and **with lightning** at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, West Bengal & Sikkim, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.

♦ **Strong Wind** (speed reaching 50-60 kmph) likely over Southwest & West Central Arabian Sea, Northeast, East Central & Southeast Central Arabian sea; (speed reaching 45-55 kmph) likely over along & off Gujarat-Maharashtra-Karnataka-Kerala coasts and Lakshadweep-Comorin area. Fishermen are advised not to venture into these areas.

08 August (Day 2):

♦ **Heavy to very heavy rainfall** at a few places **with extremely heavy falls** at isolated places over Kerala & Mahe; **Heavy to very heavy rainfall with extremely heavy falls** at isolated places over Tamilnadu, Puducherry & Karaikal (Hilly regions of Coimbatore, Nilgiri & Theni districts) ; **Heavy to very heavy rainfall** at isolated places over Uttarakhand, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Coastal & South Interior Karnataka and **heavy rainfall** at isolated places over Himachal Pradesh, Punjab, Haryana, Chandigarh and Delhi, Uttar Pradesh, East Rajasthan, Bihar, Odisha, Andaman & Nicobar Islands, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Konkan & Goa and Coastal Karnataka.

♦ **Thunderstorm accompanied with lightning** at isolated places over Uttarakhand, Punjab, Haryana, Chandigarh and Delhi, Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim, Odisha, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Tamil Nadu, Puducherry & Karaikal.

♦ **Strong Wind** (speed reaching 50-60 kmph) likely over Southwest & West Central Arabian Sea; (speed reaching 45-55 kmph) likely over East Central & Southeast Central Arabian sea, along & off Gujarat-Maharashtra-Karnataka-Kerala coasts and Lakshadweep area. Fishermen are advised not to venture into these areas.

09 August (Day 3):

♦ **Heavy to very heavy rainfall** at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Odisha, Assam & Meghalaya, Coastal & South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe and **heavy rainfall** at isolated places over Jammu & Kashmir (UT), Ladakh, Gilgit-Baltistan, Muzaffarabad(UT), East Rajasthan, East Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Coastal Andhra Pradesh & Yanam and Telangana.

♦ **Thunderstorm accompanied with lightning** at isolated places over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Tamil Nadu, Puducherry & Karaikal.

♦ **Strong Wind** (speed reaching 50-60 kmph) likely over Southwest & West Central Arabian Sea. Fishermen are advised not to venture into these areas.

10 August (Day 4):

♦ **Heavy to very heavy rainfall** at isolated places over Himachal Pradesh, Uttarakhand, Haryana,

Chandigarh & Delhi, Uttar Pradesh, East Rajasthan, Odisha, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Coastal & South Interior Karnataka and Kerala & Mahe and **heavy rainfall** at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad(UTs), Punjab, West Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, Gangetic West Bengal, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Telangana, Rayalaseema and Tamil Nadu, Puducherry & Karaikal.

♦ **Thunderstorm accompanied with lightning** at isolated places over Gangetic West Bengal, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.

♦ **Strong Wind** (speed reaching 50-60 kmph) likely over Southwest & West Central Arabian Sea. Fishermen are advised not to venture into these areas.

11 August (Day 5):

♦ **Heavy to very heavy rainfall** at isolated places over East Rajasthan, Konkan & Goa and Coastal Andhra Pradesh & Yanam and **heavy rainfall** at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad (UTs), Himachal Pradesh, Haryana, Chandigarh & Delhi, Uttar P West Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Telangana, Rayalaseema, Coastal Karnataka and Kerala & Mahe.

♦ **Thunderstorm accompanied with lightning** at isolated places over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.

♦ **Strong Wind** (speed reaching 50-60 kmph) likely over Southwest & West Central Arabian Sea. Fishermen are advised not to venture into these areas.

Weather Outlook for subsequent 2 days from 12th to 14th August, 2020

♦ Fairly widespread to widespread rainfall/thundershowers likely over east and northeast India, parts of central & northwest India and Andaman & Nicobar islands. Isolated heavy to very heavy falls also likely over eastern parts of central India, northeastern states, along the northern parts of west coast and Rajasthan.

♦ Isolated to scattered rainfall/thundershowers likely over rest parts of the country.

Salient advisories

- **Strong Wind** (speed reaching 50-60 kmph) likely over Southwest & West Central Arabian Sea, Northeast, East Central & Southeast Central Arabian sea; (speed reaching 45-55 kmph) likely over along & off Gujarat-Maharashtra-Karnataka-Kerala coasts and Lakshadweep-Comorin area on 7th, **Strong Wind** (speed reaching 50-60 kmph) likely over Southwest & West Central Arabian Sea; (speed reaching 45-55 kmph) likely over East Central & Southeast Central Arabian sea, along & off Gujarat-Maharashtra-Karnataka-Kerala coasts and Lakshadweep area on 8th, **Strong Wind** (speed reaching 50-60 kmph) likely over Southwest & West Central Arabian Sea from 9th to 11th August, Fishermen are advised not to venture into these areas.
- **Thunderstorm accompanied with lightning & gusty wind (speed 30-40 kmph)** very likely at isolated places over West Rajasthan and **with lightning** at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, West Bengal & Sikkim, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura on 7th, **Thunderstorm accompanied with lightning** at isolated places over Uttarakhand, Punjab, Haryana, Chandigarh and Delhi, Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim, Odisha, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Tamil Nadu, Puducherry & Karaikal on 8th, **Thunderstorm accompanied with lightning** at isolated places over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Tamil Nadu, Puducherry & Karaikal on 9th, **Thunderstorm accompanied with lightning** at isolated places over Gangetic West Bengal, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura on 10th, **Thunderstorm accompanied with lightning** at isolated places over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura on 11th August, provide mechanical support to banana, young fruit plants and vegetables and carry out propping up in sugarcane to prevent the crops from lodging due to strong winds. Keep harvested produce at safer places. Farmers are advised to avoid standing in the open or working in the field during thunderstorm period. Keep cattle/goats indoor during thunderstorm.
- As **rain/thundershowers** likely at **most/many places** over Andaman & Nicobar Islands, Assam & Meghalaya, West Bengal & Sikkim, Jharkhand, Nagaland, Manipur, Mizoram & Tripura, Himachal Pradesh, Uttarakhand, East Madhya Pradesh, Chhattisgarh, Konkan & Goa, Coastal & South Interior Karnataka, Kerala & Mahe during the period, over Gujarat Region on 7th & 10th, over Uttar Pradesh, Bihar, Odisha, Vidarbha, Telangana, and Coastal Andhra Pradesh from 8th to 11th **along with Heavy to very heavy rainfall** at a few places **with extremely heavy falls** at isolated places over Kerala & Mahe; **Heavy to very heavy rainfall with extremely heavy falls** at isolated places over Coastal Karnataka and Tamilnadu, Puducherry & Karaikal (Hilly regions of Coimbatore, Nilgiri & Theni districts) ; **Heavy to very heavy rainfall** at isolated places over Gujarat State, Madhya Maharashtra (Ghat areas), South Interior Karnataka and Konkan & Goa; **heavy rainfall** at isolated places over Himachal Pradesh, Uttarakhand, Rajasthan, West Bengal & Sikkim, Andaman & Nicobar Islands, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura on 7th, **Heavy to very heavy rainfall** at a few places **with extremely heavy falls** at isolated places over Kerala & Mahe; **Heavy to very heavy rainfall with extremely heavy falls** at isolated places over Tamilnadu, Puducherry & Karaikal Hilly regions of Coimbatore, Nilgiri & Theni districts) ; **Heavy to very heavy rainfall** at isolated places over Uttarakhand, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Coastal & South Interior Karnataka and **heavy rainfall** at isolated places over Himachal Pradesh, Punjab, Haryana, Chandigarh and Delhi, Uttar Pradesh, East Rajasthan, Bihar, Odisha, Andaman & Nicobar Islands, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura,

Madhya Maharashtra, Konkan & Goa and Coastal Karnataka on **08 August**, **Heavy to very heavy rainfall** at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Odisha, Assam & Meghalaya, Coastal & South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe and **heavy rainfall** at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad (UTs), East Rajasthan, East Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Coastal Andhra Pradesh & Yanam and Telangana on **09th**, **Heavy to very heavy rainfall** at isolated places over Himachal Pradesh, Uttarakhand, Haryana, Chandigarh & Delhi, Uttar Pradesh, East Rajasthan, Odisha, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Coastal & South Interior Karnataka and Kerala & Mahe and **heavy rainfall** at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad (UTs), Punjab, West Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, Gangetic West Bengal, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Telangana, Rayalaseema and Tamil Nadu, Puducherry & Karaikal on **10th**, **Heavy to very heavy rainfall** at isolated places over East Rajasthan, Konkan & Goa and Coastal Andhra Pradesh & Yanam and **heavy rainfall** at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad (UTs), Himachal Pradesh, Haryana, Chandigarh & Delhi, Uttar P West Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Telangana, Rayalaseema, Coastal Karnataka and Kerala & Mahe on **11th** August, avoid irrigation, intercultural operations and application of plant protection measures and fertilizers to the standing crops. Arrange for adequate drainage to avoid water stagnation in the crop fields. Drain out excess water from the fields of pulses, maize and vegetables.

➤ In North Bank Plain Zone of **Assam**, farmers of flood affected areas are advised to collect short duration HYV rice varieties like Luit, Kapili, Kolong, Dishang etc. and sow the seeds in nursery bed. These varieties can be transplanted upto 1st week of September. Long duration improved cultivars with staggering ability like Gitesh can be transplanted up to 20 August. Local cultivars like Monohar Sali, Andew Sali and improved cultivar Prafulla can also be transplanted up to 31 August with aged seedlings. (60 to 90 days). In Upper Brahmaputra Valley Zone, nursery raising of the photo insensitive short duration (90-100 days) varieties like Luit, Kopilee and Dishang is advocated for areas where the rice crop was totally damaged due to flood. The seedlings of these varieties can be transplanted in the main field during 1st week of September.

➤ **Undertake the following operations:**

- sowing of the medium to short duration crops like ragi, maize, Foxtail Millet, Little Millet and Kodo millet crops and transplanting of rice, ragi crops in South Interior Karnataka.
- transplanting of rice in Visakhapatnam, Kurnool, Krishna, West Godavari, Chittoor districts of Andhra Pradesh.
- transplanting of rice and sowing of red gram in Telangana.
- transplanting of *Sali* rice in Assam & Meghalaya.
- transplanting of *Kharif* rice in Sub-Himalayan West Bengal, Odisha, Bihar and Jharkhand.
- transplanting of *Aman* rice in Gangetic West Bengal and Tripura.
- sowing of cucumber, pumpkin, bottle gourd, bitter gourd, watermelon, cabbage, etc. and transplanting of brinjal, chilli and early cauliflower in East Uttar Pradesh.

Detailed Agromet Advisories

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

Realised Rainfall: Significant rainfall occurred in all the districts of Andhra Pradesh except Krishna, Sirkakulam & Vizianagram; in Adilabad, Jagtial, Jangaon, Karimnagar, Nalgonda, Nirmal, Ranjanna Sircilla, Sangareddy, Suryapet, Vikarabad & Y. Bhuvangiri districts of Telangana; in all the districts of Kerala; in Ariyalur, Chennai, Coimbatore, Karaikal, Nilgiris, Theni, Tiruvallur, Tiruvarur, Vellore districts of Tamilnadu; in all districts of Coastal Karnataka, in Belagavi, Dharwad, Gadag, Haveri, Kalaburgi, Koppal and Vijayapura districts of North Interior Karnataka and in all districts of South Interior Karnataka except Ballari, Bengaluru Urban, Mandya and Ramanagara districts.

- **Advisories: Thunderstorm accompanied with lightning** at isolated places over Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Tamil Nadu, Puducherry & Karaikal on 8th, over Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Tamil Nadu, Puducherry & Karaikal on 9th August, provide mechanical support to banana, young fruit plants and vegetables and carry out propping up in sugarcane to prevent the crops from lodging due to strong winds. Keep harvested produce at safer places. Farmers are advised to avoid standing in the open or working in the field during thunderstorm period. Keep cattle/goats indoor during thunderstorm.
- As **rain/thundershowers** likely at **most/many places** over Coastal & South Interior Karnataka, Kerala & Mahe during the period, over Telangana and Coastal Andhra Pradesh from 8th to 11th **along with Heavy to very heavy rainfall** at a few places **with extremely heavy falls** at isolated places over Kerala & Mahe; **Heavy to very heavy rainfall with extremely heavy falls** at isolated places over Coastal Karnataka and Tamilnadu, Puducherry & Karaikal (Hilly regions of Coimbatore, Nilgiri & Theni districts) ; **Heavy to very heavy rainfall** at isolated places over South Interior Karnataka on 7th , **Heavy to very heavy rainfall** at a few places **with extremely heavy falls** at isolated places over Kerala & Mahe; **Heavy to very heavy rainfall with extremely heavy falls** at isolated places over Tamilnadu, Puducherry & Karaikal Hilly regions of Coimbatore, Nilgiri & Theni districts) ; **Heavy to very heavy rainfall** at isolated places over Coastal & South Interior Karnataka and **heavy rainfall** at isolated places over Coastal Karnataka on **08 August**, **Heavy to very heavy rainfall** at isolated places over Coastal & South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe and **heavy rainfall** at isolated places over Coastal Andhra Pradesh & Yanam and Telangana on **09th**, **Heavy to very heavy rainfall** at isolated places over Coastal Andhra Pradesh & Yanam, Coastal & South Interior Karnataka and Kerala & Mahe and **heavy rainfall** at isolated places over Telangana, Rayalaseema and Tamil Nadu, Puducherry & Karaikal on **10th** , **Heavy to very heavy rainfall** at isolated places over Coastal Andhra Pradesh & Yanam and **heavy rainfall** at isolated places over Telangana, Rayalaseema, Coastal Karnataka and Kerala & Mahe on **11th** August, avoid irrigation, intercultural operations and application of plant protection measures and fertilizers to the standing crops. Arrange for adequate drainage to avoid water stagnation in the crop fields. Drain out excess water from the fields of pulses, maize and vegetables.

Karnataka

- In North Interior Karnataka, complete sowing of cotton, groundnut, sesame and sunflower. Pulse magic spray (micronutrient) @ 5 gm/litre of water when the green gram, black gram and soybean crops are at 50% flowering and another spray at the time of pod development stage (50%) is advised.
- In Coastal Karnataka, ensure proper drainage in arecanut fields. Undertake hand weeding in maize and cotton crops. In rice fields, for the control of weeds, apply Butachlor 1litre / ha by mixing with 20 to 25

kg sand maintaining 1 cm water level. Continue planting of Black pepper and transplanting of Arecanut.

- In South Interior Karnataka, continue sowing of the medium to short duration crops like ragi, maize, Foxtail Millet, Little Millet and Kodo millet crops and transplanting of rice, ragi crops. Carry out intercultural operation in red gram, ragi and groundnut crops. Complete sowing of jowar, cowpea, red gram, green gram, black gram, horse gram, field bean crops.

Animal Husbandry

- In Karnataka, drumstick leaves can be fed to cow, it is having high protein and mineral content so it will enhance the immunity of livestock. Keep poultry birds in a relatively warmer places or make the place warm by using electrical bulbs

Kerala

- In High Altitude Zone, continue sowing/transplanting of rice. To control soft rot in ginger, drench the soil with 1% Bordeaux mixture/0.3% Mancozeb. Apply green leaf mulching to prevent soil erosion and to increase the organic matter content in the soil.
- In Problem Areas Zone, prepare cow dung, neem cake and trichoderma mixture at 90:10:1 ratio. Apply 200gm of above mixture for each basin to control the root rot diseases of leguminous crops.
- In Northern Zone, weather is congenial for stem borer attack in paddy, apply Takumi ® @3g per 10L of water.
- In Central Zone, ensure drainage facilities in low land banana plantations. Due to the increase in rainfall, there is a chance of Rhizome rot in banana. As a precaution, drench the basin with three litre of pseudomonas solution (20g per one litre of water). Also there is a chance of Anthracnose disease in cowpea. As a prophylactic measure, apply 1% Bordeaux mixture or spray copper oxychloride 3 gram per one litre of water.

Andhra Pradesh

- In Visakhapatnam, Kurnool, Krishna, West Godavari, Chittoor districts, undertake transplanting of rice after clipping of leaf tips to avoid infestation of stem borer and leaf folder.
- In Guntur district, continue sowing of maize, groundnut, bajra, jowar and cotton.
- In Prakasam district, undertake sowing of bajra or sorghum as a border crop to groundnut for preventions of stem rot caused by thrips.
- In Y.S.R.(Kadapa) district, continue sowing of groundnut Kadiri-9, Kadiri Harithandhra, Anantha, Greeshma, Narayani, Abhaya, Dharani, Kadiri Amaraavathi and Kadiri Chitravathi which are high yielding and drought-tolerant varieties.
- In Nellore district, the present weather conditions are favourable for stem borer in rice. To control, apply Chlorpyrifos @ 2.5 ml (or) Acephate @ 1.5 grams (or) Cartop hydrochloride @ 2.0 g per litre of water.

Telangana

- In Northern Telangana, continue sowing of red gram.
- In Telangana, undertake transplanting of rice in East-West direction with 20 cm alleyways at 2 m interval to minimize the incidence of BPH during the crop season.
- The incidence of hispa is noticed in rice; if 2 adults per hill or 2 damaged leaves per hill is noticed, spray Profenophos @ 2 ml or Chlorpyrifos @ 2.5 ml or Quinalphos @ 2 ml per litre of water.

Tamil Nadu

- In Western Zone, prevailing weather is conducive for Downey mildew in maize. Spray Metalxyl + Mancozeb combination 2gm/lit water.
- In High Altitude Hilly Zone, disease resistant potato variety kufri girdhari may be chosen for planting to avoid disease incidence during autumn season period.
- In Southern Zone, prevailing current weather is favourable for the attack of jassids in Groundnut.

Nymphs and adults inject toxins resulting in whitening of veins and chlorotic patches especially at the tips of leaflets, in a typical 'V' shape. Heavily attacked crop looks yellow and gives a scorched appearance known as 'hopper burn'. Follow the intercropping and crop rotation and field sanitation and Spray dimethoate 30EC @ 650ml/ha in 600 liter water.

- In High Rainfall Zone, use transparent polythene sleeves (2%) to cover the banana bunches to protect from heavy rainfall. It increases the quality of bunches.

Animal Husbandry:

- In Tamilnadu, disinfectants must be sprayed in the livestock shed in order to avoid the pathogenic infection to animals. Due to the risk incidence of Blue tongue infection in sheep during rainy season, farmers are advised to segregate the sheep showing symptoms like fever and pneumonia and get veterinary advice.

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

Realised Rainfall: Rainfall occurred in all districts except Anjaw, Changlang, Lohit and Tirap districts of Arunachal Pradesh; all districts except Dibrugarh, Kamrup(Rural), Kamrup(Metro), Karbi Anglong, Morigaon and Nowgaon districts of Assam; all districts except Jaintia Hills district of Meghalaya; all districts except Chhimitupui district of Mizoram; all districts except Chandel, Churachandpur and Imphal East districts of Manipur; Longleng and Phek districts of Nagaland and North Tripura and West Tripura districts of Tripura.

Advisories:

- **Thunderstorm accompanied with lightning** at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura on 7th, over Meghalaya and Nagaland, Manipur, Mizoram & Tripura on 8th, over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, on 9th to 11th August, provide mechanical support to banana, young fruit plants and vegetables and carry out propping up in sugarcane to prevent the crops from lodging due to strong winds. Keep harvested produce at safer places. Farmers are advised to avoid standing in the open or working in the field during thunderstorm period. Keep cattle/goats indoor during thunderstorm.
- As **rain/thundershowers** likely at **most/many places** over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura during the period **along with heavy rainfall** at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura on 7th, **Heavy to very heavy rainfall** at isolated places over Assam & Meghalaya and **heavy rainfall** at isolated places over Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura on 08 & 9th, **heavy rainfall** at isolated places over Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura on 10th, over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura on 11th August, avoid irrigation, intercultural operations and application of plant protection measures and fertilizers to the standing crops. Arrange for adequate drainage to avoid water stagnation in the crop fields. Drain out excess water from the fields of pulses, maize and vegetables.

Arunachal Pradesh

- In Arunachal Pradesh, undertake harvesting of matured cobs of maize in clear weather. Spray neem pesticides @ 5 ml/litre of water to control Shoot borer in ginger. Undertake harvesting of matured cobs of maize. Spray neem pesticides @ 5 ml/litre of water to control Shoot borer attack in ginger.

Assam & Meghalaya

- In Hill Zone of Assam, continue sowing of pigeon pea, sesame and nursery sowing of cauliflower. Continue transplanting of high yielding varieties of *Sali* rice. Soil drenching with 1.0% Bordeaux

mixture or 0.05% Bavistin is effective against banana wilt. Spray Malathion (0.1%) to control sap sucking insects (aphids/mealy bug/scales) in Khasi Mandarin. Drainage system should be improved to prevent rhizome rot in ginger and turmeric. The affected areas may be drenched with 0.3% Mancozeb 75 WP @ 2g/l of water.

- In Lower Brahmaputra Valley Zone, continue transplanting of *Sali* rice. Due to recurring flood in some parts of the region, continue sowing of short duration rice varieties like Luit, Kapilee and dishang in advance and the seeds may be directly sown in the field during the month of August after flood water recedes from the field. Spray Quinalphos 25 EC @ 2 ml per litre of water or Monocrotophos 40 EC @ 4 ml per litre of water against stem borer and case worm attack in *Sali* rice during the rain free weather. Continue sowing of sesame and Arhar after heavy spell of rain.
- In Upper Brahmaputra Valley Zone, continue transplanting of *Sali* rice seedlings of short and medium duration varieties in the areas which are not affected by flood. Nursery raising of the photo insensitive short duration (90-100 days) varieties like Luit, Kopilee and Dishang is advocated for areas where the rice crop was totally damaged due to flood. The tender seedlings of these varieties can be transplanted in the main field during 1st week of September. Continue sowing of sesamum and green gram.
- In Barak Valley Zone, complete transplanting of *Sali* rice at the earliest. Spray Quinalphos 25 EC @ 2 ml per litre of water or Monocrotophos 40 EC @ 4 ml per litre of water against the infestation of stem borer and case worm in *Sali* rice at tillering stage on non rainy days. Continue sowing of early cauliflower and radish.
- In Central Brahmaputra Valley Zone, continue transplanting of seedlings of *Sali* rice. Spray Chloropyriphos 20EC or Monocrotophos 40EC @ 1.5ml per litre of water against rice hispa along with other insects like leaf folder, case worm etc in *Sali* rice. Complete sowing of sesamum and Arhar. Continue harvesting of Capsularis and Olitorius jute. Continue nursery bed preparation and sowing of early brinjal, cauliflower, cabbage, broccoli. To avoid damage of seedlings due to rainy season, farmers should apply portable transparent Polythene shade on bed of nursery seedlings. For flood prone areas farmers should go for portable nursery bed in wooden boxes, thermocol boxes and portable seedling tray for raising of seedlings of different vegetables like brinjal, cabbage, cauliflower, broccoli etc. within mid August. Undertake land preparation for sowing of *kharif* pulses (green gram & black gram).
- In North Bank Plain Zone, undertake land preparation/ sowing of *kharif* sesame, black gram and green gram. Farmers of flood affected areas are advised to collect short duration HYV rice varieties like Luit, Kapili, Kolong, Dishang etc. sow the seeds in nursery bed. These varieties can be transplanted upto 1st week of September. Long duration improved cultivars with staggering ability like Gitesh can be transplanted up to 20 August. Local cultivars like Monohar *Sali*, Andrew *Sali* and improved cultivar Prafulla can also be transplanted up to 31 August with aged seedlings. (60 to 90 days). Spray Chloropyriphos 20EC or Quinalphos 25EC @ 2.0-2.5 ml per litre of water against rice hispa along with other insects like leaf folder, case worm etc in *Sali* rice field at tillering stage. Spray Malathion @ 2 ml/litre of water at 30 days interval against shoot borer disease attack in ginger or turmeric. Complete the sowing of early cauliflower and Broccoli in the bed within mid of August. To avoid damage of seedlings due to rainy season, farmers should apply portable transparent Polythene shade on bed of nursery seedlings.
- In Meghalaya, continue transplanting of *Sali* rice. Ensure proper drainage system in the ginger/turmeric and vegetable crop field. Undertake sowing of cow pea and French bean on clear weather. Do staking with bamboo structure for support in cucurbit crops. Avoid stagnation of rain water at the base of ginger.

Manipur, Mizoram, Tripura and Nagaland

- In Manipur, spray Dithane M-45 @ 2ml/ litre water to control Tikka disease in groundnut. Spray

Hexaconazole 5% EC @2ml/ litre of water against rust in soybean. Monitor water level in the rice crop field. Drain out water to avoid water logging in the maize/ black gram/ ginger field. Spray Fipronil 5%SC @ 2ml/ litre water against Leaf Folder/ Gall Midge/ Stem Borer and Copper Hydroxide 53.8% DF @ 3g/ litre water against Bacterial Leaf Blight in rice. To prevent Leaf Spot disease in ginger, apply Bordeaux mixture (5:5:50) or Captan @ 1.5 g/litre of water after 4–5 weeks of sowing.

- In Mizoram, continue sowing of soybean. Maintain the drainage channel around the soybean field to drain out excess water. Undertake harvesting of green gram immediately. Spray Streptocycline @ 0.6g/ litre of water to control the disease bacterial leaf blight disease in rice. Spray Copper Oxy Chloride (COC) or Ridomil Gold @ 2 g/litre of water in turmeric during sunny days to reduce shoot rot disease in vegetative stage.
- In Tripura, complete transplanting of Aman rice. Maintain good drainage facilities in maize and groundnut fields. Cloudy and humid weather is conducive for the attack of Leaf Curl disease in vegetable. To manage the attack apply Imidachloprid 2ml per litre of water.
- In Nagaland, undertake gap filling with seedlings of same age of rice by replanting of dead hills within 7-10 days of transplanting. Monitor water level in the rice field. Construct proper drainage system to avoid flooding in rice field. Continue harvesting of Naga King chillis, tomato, cow pea and maize. To improve the disease resistance in banana crop, drench the basin with Pseudomonas (bio-control agent) @20g/litre water cautiously on a rain free condition. Cut off the severely affected leaves due to Sigatoka leaf spot disease and burn it. Followed by spraying 1% Bordeaux mixture @1g/litre water on rain free weather. Repeat 4-5 sprayings at 2 weeks intervals depending on the severity of the disease.

Animal Husbandry

- In Northeastern states, carry out immunizations against BQ, HS, Foot and mouth disease as well as anthrax diseases in livestock like cows, buffaloes, goats and pigs. Also carry out vaccination (RDF1) against Ranikhet disease in one week old chicks and against Gamboro disease in two weeks old chicks. During the monsoon season, animals should not be fed with water submerged rotten grasses.
- In North Bank Plain Zone, prevailing weather may cause stress to poultry birds. So the poultry farmers are advised to feed them with lemon water and Glucon-D @10gm/ 1 litre of water.

Fishery

- In Manipur, raise the dykes of pond to avoid draining of rain water directly into the pond. Avoid erosion of dyke. Keep the pond water circulation through aeration and periodic exchange of water.

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

Realised Rainfall: Significant rainfall occurred in all districts of Andaman & Nicobar Islands, in all districts of Bihar except Arwal, Aurangabad, Bhabua, Nalanda, Saran and Vaishali; in all district of Jharkhand except Chatra, Garhwa, Godda and Palamu; in all districts of Odisha except Kalahandi and Nawapara; in all districts of Sub-Himalayan West Bengal & Sikkim and in all districts of Gangetic West Bengal except East Midnapore and West Midnapore. Weather remained dry/mostly dry over the rest of the region.

Advisories:

- **Thunderstorm accompanied with lightning** at isolated places over Jharkhand, West Bengal & Sikkim on 7th, over Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim on 8th & 9th, over Odisha on 8th, over Gangetic West Bengal on 10th August, provide mechanical support to banana, young fruit plants and vegetables and carry out propping up in sugarcane to prevent the crops from lodging due to strong

winds. Keep harvested produce at safer places. Farmers are advised to avoid standing in the open or working in the field during thunderstorm period. Keep cattle/goats indoor during thunderstorm.

- As **rain/thundershowers** likely at **most/many places** over Andaman & Nicobar Islands, West Bengal & Sikkim, Jharkhand during the period, over Bihar, Odisha from 8th to 11th **along with heavy rainfall** at isolated places over West Bengal & Sikkim, Andaman & Nicobar Islands on 7th, **Heavy to very heavy rainfall** at isolated places over Sub-Himalayan West Bengal & Sikkim and **heavy rainfall** at isolated places over Bihar, Odisha, Andaman & Nicobar Islands on **08 August**, **Heavy to very heavy rainfall** at isolated places over Odisha and **heavy rainfall** at isolated places over Bihar, Jharkhand on **09th & 10th**, **heavy rainfall** at isolated places over Sub-Himalayan West Bengal & Sikkim, Odisha on **11th August**, avoid irrigation, intercultural operations and application of plant protection measures and fertilizers to the standing crops. Arrange for adequate drainage to avoid water stagnation in the crop fields. Drain out excess water from the fields of pulses, maize and vegetables.

Odisha

- In East and South-Eastern Coastal Plain Zone, carry out transplanting of 20-25 days old HYV rice seedlings at a spacing of 20x15 cm; plant 2-3 seedlings per hill. Carry out hand weeding and earthing up in maize crop at 20-25 DAS. To control Fall Army worm in maize crop, spray biopesticide Beauveria bassiana @ 1200 g/acre by mixing in 200 litres of water; use 10-12 bird perches per acre and remove them before tasseling stage; dust mixture of sand, soil and wooden ash inside the leaf whorl so that the caterpillars cannot feed on leaves.
- In North Central Plateau Zone, prepare nursery bed over 10 decimal area for transplanting in 1 acre; apply 8 quintal FYM, 4kg Urea, 4kg SSP and 2kg MOP; properly treat the seeds with 2g Carbendazim or 2g Thiram per kg seeds; soak the seeds in water for 24 hours and put them in gunny bag for sprouting; sow the sprouted seeds, cover the nursery bed with straw and sprinkle water. Prepare the main field for transplanting by puddling the soil and adding 4-ton FYM per acre.
- In Mid Central Table Land Zone, ensure life saving irrigation to rice nurseries; spray Bispyribac sodium@20g a.i. ha-1 in 500 litres of water to control weeds in direct seeded rice as well as early sown nurseries. Prevailing high temperature condition may lead to infestation of rice thrips in rice nursery; apply Fipronil 5SC@2ml/lit of water or Thiomethoxam@0.4g/ lit of water. Carry out nursery treatment of Brinjal seedlings by soil drenching in nursery with Tebuconazole@1ml/l and Plantomycin@1g/l of water seven days before transplanting.

Bihar

- In North East Alluvial Zone, after rainfall, there is chance of attack of hairy caterpillar due to high temperature and humidity. To control, destroy the egg cluster or new larva quickly from field and also spray Lambda Cyhalothrin 5 EC @ 1 ml or Indoxacarb @ 1 ml litre of water; drain out the extra water by making a channel.
- In South Bihar Alluvial Zone, to control weeds in rice field, spray Butachlor 50 EC @ 1200 ml/acre or Pretilachlor 50 EC @ 800 ml /acre, Metsulfuron + Chlorimuron @ 8 g/acre, Hothaxisfuron 15 WDG @ 50 g/acre or 2, 4-D @ 400 ml /acre when sky is clear. To control the insect/pest in nursery, spray Chlorpyrifos 20 E.C @ 1 ml/ litre of water. Drain out excess water or make trench around the kharif maize field; carry out hand weeding in early sown kharif maize; for cut worm attack in maize, apply Chlorpyrifos @ 2ml per litre of water or Furadon 4-5 granules per whorl of the maize plant.

Jharkhand

- In Central & North Eastern Plateau Zone, undertake transplanting of 15 days old rice seedlings; wash the mud from root thoroughly and dip the root in Chlorpyrifos insecticide @ 1ml/litre of water for 12 hours before transplanting. Continue sowing of high-yield variety of til and cowpea. Prepare field for sowing of moong and urad. Undertake planting of young saplings of mango, guava and litchi. Undertake sowing of sweet potato. Manage proper drainage after interculturing in pigeon pea crop; apply Monocrotophos @1ml with Teepol @ 0.5 ml per litre of water to control leaf eating and sucking pest.
- In Western Plateau Zone, farmers having at least 1-2 irrigation facility, may proceed for sowing of maize with minimum duration variety (which matures in 80 – 90 days) in fallow medium land on ridge. In medium

land, rice transplanting is still uncompleted; as per weather forecast good amount of rain is expected during next few days; complete rice transplanting with 20 days of seedlings after collection of rain water flowing from upland as runoff in desired field.

West Bengal

Sub-Himalayan West Bengal:

- In Hill Zone, after transplanting of rice apply pre-emergence herbicide Butachlor (50 EC) @ 700 -800 ml per acre within 3-5 days after transplanting in standing water. Maintain proper drainage channels and manage weeds in soybean, ginger and turmeric fields.
- In Old Alluvial Zone, complete transplanting of 20-25 days old rice seedlings. Complete planting of ginger and turmeric in the main field as soon as possible after seed treatment with Bavistin @ 4g/kg. Undertake sowing of early cauliflower and cabbage seeds in the nursery bed; before sowing, treat seeds with Bavistin or Mancozeb. To control powdery mildew in cucurbitaceous crops, spray Carbendazim @ 5 g or Zineb @ 20 g per 10 litres of water.
- In Terai Zone, carry out harvesting of jute crop. Before transplanting of rice seedlings, plough the field and leave it for 15-20 days for decomposition of weeds and previous crop stubble; apply 5-7 kg Urea, 30kg SSP & 7-8kg MOP per bigha at the time of last ploughing; apply Zinc Sulphate @3 kg per bigha to protect crop from Khaira disease.

Gangetic West Bengal:

- In Coastal Saline Zone, complete transplanting of wet-seeded Aman paddy within the first fortnight to ensure good yield; maintain proper water level in the field and drain out excess water from the newly transplanted fields. Gourd crops are at fruiting stage; keep the field and irrigation channels weed-free.
- In Red & Laterite Soil Zone, keep 2cm water level in the rice field. Provide proper drainage channels to drain out the excess water from brinjal field; to control little leaf disease, uproot the affected plants and dispose them away from the field; spray Malathion @ 2 ml/litre of water at clear weather condition if leaf hoppers are noticed.

Andaman & Nicobar Islands

- Close the bunds in rice main field to store water and pull out 30 days old seedlings of medium duration rice for transplanting. Remove weed manually from chilli and okra. Keep the soil dry near the root area of vegetable plants to avoid diseases. Collect all the fallen coconuts from the field to avoid germination in field.

Animal Husbandry

- Regularly clean the cattle shed with bleaching powder or Calcium carbonate. Never let a cow or goat graze in a place where there is standing water. Do not allow chickens or ducks to eat wet or damp feed during this rainy season. Provide mineral mixture to the young/small animals (calf, goats and pigs) @ 20 to 25 g. Provide particular amount of de-wormers for both round worm and tape worm to cattle, goats or poultry during monsoon.

Fishery

- In West Bengal, keep the pond clean and apply lime as per recommendation. Indian major carp and foreign carp can be released in pond @ 2000 pieces fingerling. Please maintain the recommended ratio. Complementary feed must be given regularly. Don't use excess feed to avoid water pollution.

WEST INDIA [GOA, MAHARASHTRA, GUJARAT]

Realised Rainfall: Significant rainfall occurred in Dadra Nagar Haveli, Daman, Dangs, Navsari and Valsad districts, Gujarat Region, in Amreli, Devbhoomi Dwarka, Diu, Gir Somnath, Junagadh, Kutch, Morbi, Porbandar, Rajkot and Surendranagar districts of Saurashtra & Kutch; in all districts of Maharashtra except Latur.

Advisories:

- **Thunderstorm accompanied with lightning** at isolated places over Vidarbha on 7th & 8th August, provide mechanical support to banana, young fruit plants and vegetables and carry out propping up in sugarcane to

prevent the crops from lodging due to strong winds. Keep harvested produce at safer places. Farmers are advised to avoid standing in the open or working in the field during thunderstorm period. Keep cattle/goats indoor during thunderstorm.

- As **rain/thundershowers** likely at **most/many places** over Konkan & Goa during the period, over Vidarbha from 8th to 11th, over Gujarat Region on 7th & 10th **along with Heavy to very heavy rainfall** at isolated places over Gujarat State, Madhya Maharashtra (Ghat areas), on 7th, **heavy rainfall** at isolated places over Madhya Maharashtra, Konkan & Goa on **08 August**, over Konkan & Goa on **09th**, **Heavy to very heavy rainfall** at isolated places over Konkan & Goa and **heavy rainfall** at isolated places over Vidarbha, Madhya Maharashtra on **10th & 11th** August, avoid irrigation, intercultural operations and application of plant protection measures and fertilizers to the standing crops. Arrange for adequate drainage to avoid water stagnation in the crop fields. Drain out excess water from the fields of pulses, maize and vegetables.

Maharashtra

- **In Konkan**, maintain 2.5 to 5 cm water level in rice fields. Drain out excess water from rice fields. In Sindhudurg district, to control blast in rice, spray Tricyclazole @ 10 g or Isoprothiolane @ 10 ml per 10 liters of water during clear weather and undertake intercultural operations like weeding in groundnut during clear weather.
- **In Madhya Maharashtra**, maintain 2-3 cm water level in rice fields. Undertake intercultural operations like weeding in 30-45 days old pigeon pea. In Ahmednagar district, to control leaf rolling caterpillar in pigeon pea, spray Azadirachtin 1500 ppm @ 50 ml per 10 liters of water during clear weather. In Dhule District, to control sucking pest in groundnut, spray Methyl demeton 25 EC @ 10 ml / 10 liter of water during clear weather. As heavy rainfall at isolated places is expected in the ghat area of Kolhapur during next 3-4 days, drain out excess of water from standing crops, vegetables and orchards. Maintain 3 to 5 cm water level in rice fields. To control Powdery mildew in green gram, spray water dissolving Sulphur @ 1250 g or Carbendazim @ 500 g per ha during clear weather.
- **In Marathwada**, undertake intercultural operation like weeding in sapota orchards during clear weather condition. If water stress condition is observed in soybean, spray 13:00:45 @ 15 g or Urea @ 15 g + Potash @ 15 g per liter of water during clear weather condition. Due to nutrient deficiency yellowing of leaves is observed in turmeric crop for management apply @ 20 kg Nitrogen per acre and @ 4 kg Zinc sulphate per acre during clear weather condition.
- **In Vidarbha**, Maintain 2- 3cm water level in the transplanted rice fields. Undertake intercultural operations during clear weather for management of weeds and to improve soil aeration in all kharif crops. To control sucking pest in cotton, spray 5 % Nimboli Arc during clear weather. In Ambiya bahar of citrus plantation spray 1 kg urea + 1 gram NAA in 100 liters of water for control of fruit drop .

Gujarat

- In North Gujarat, carry out transplanting of vegetable crops. Due to forecast of rainfall, avoid application of irrigation and fertilisers in the standing crops. Drained out access water from groundnut, cotton, green gram and pearl millet crops.
- In Middle Gujarat, continue transplanting of rice, chili and tomato.
- In South Gujarat, remove excess water and maintain 3-5 cm of water level in rice fields. Provide proper drainage to remove excess water from sugarcane field. Spray 1.5% Potassium Silicate at tillering and panicle initiation stage of rice, in clear weather.
- In Saurashtra and Kutch, continue transplanting of onion, tomato, chili, brinjal and early cauliflower. Undertake intercultural operations in cotton, sesame, pearl millet, green gram, black gram, cow pea at *vapsa* condition.

Animal Husbandry

- In Gujarat, protect livestock during rain.

CENTRAL INDIA [M.P., CHHATTISGARH]

Realised Rainfall: Rainfall occurred in all districts of Madhya Pradesh and Chhattisgarh.

- **Advisories: Thunderstorm accompanied with lightning** at isolated places over Madhya Pradesh and Chhattisgarh on 7th & 8th August, provide mechanical support to banana, young fruit plants and vegetables and carry out propping up in sugarcane to prevent the crops from lodging due to strong winds. Keep harvested produce at safer places. Farmers are advised to avoid standing in the open or working in the field during thunderstorm period. Keep cattle/goats indoor during thunderstorm.
- As **rain/thundershowers** likely at **most/many places** over East Madhya Pradesh, Chhattisgarh during the period, **along with heavy rainfall** at isolated places over East Madhya Pradesh, Chhattisgarh on 09th, 10th, 11th August, avoid irrigation, intercultural operations and application of plant protection measures and fertilizers to the standing crops. Arrange for adequate drainage to avoid water stagnation in the crop fields. Drain out excess water from the fields of pulses, maize and vegetables.

Madhya Pradesh

- In Kymore and Satpura Hill Zone, drain out excess water from maize and soybean fields. To control of stem borer, leaf eating caterpillar and sucking pests in soybean, spray pre mixed Thiomethazam + Lambda Cyhalothrin @ 125 ml/ha after current spells of rain.
- In Jhabua Hills Zone, in maize, after weed control, give 1/3 dose of recommended nitrogen fertilizer in form of urea. Prepare drainage channels in proper distance for drainage of excess rain water in soybean and maize crop fields. Prepare field for cultivation of rainy season vegetables in raised furrow and poly-mulching method.
- In Central Narmada valley Zone, undertake hand weeding in soybean and maize after current spells of rain. Clean the basins of old fruit trees.
- In Bundelkhand Zone, continue nursery sowing of tomato, chilli, brinjal, etc. Carry out planting of new orchards of papaya, mango, lemon etc.

Chhattisgarh

- In Northern Hill Zone, in the transplanted rice fields, maintain water level up to 3-5 cm. In rice, under broadcasting situation, biasi should be done at 30-35 DAS followed by saghan chalai as per availability of sufficient moisture. Farmers are advised Weeding/ Intercultural operation in maize before broadcasting of urea. Apply 10 - 15 grains of furadon (insecticides) in each leaf sheath if the crops are attacked by stem borer.
- In Chhattisgarh Plain Zone, in the upland areas where rainfall has been less, rice crop early varieties like Tulsi, Aditya, Kalinga-3, Samleshwari, Vanprabha, Indira R-1 (Rajeshwari), Indira Barani Dhan-1 should be selected and sown in lines. In early duration varieties of arhar, row to row distance should be maintained 60 cms and plant to plant distance should be maintained 15cms. Medium duration varieties are sown at a distance of 90 cms x 20 cms.
- In Bastar Plateau Zone, complete planting of tuber crops like colocasia, jimikand, ginger and turmeric by the end of June. Prepare vegetable nursery on a 15cm high raised bed; sow the seeds after seed treatment against rotting diseases; provide thin net around the nursery as a protection against vector diseases. Continue sowing of minor millet (Kodo) and finger millet.

Animal Husbandry

- In Madhya Pradesh, vaccinate cattle to prevent from Haemorrhagic Septicaemia and Black Quarter diseases. Vaccinate the goat to control PPR disease.

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

Realised Rainfall : Significant rainfall occurred in all the districts of Himachal Pradesh except Kinnaur and Lahaul & Spiti; in Jammu, Kathua, Rajouri, Reasi and Samba districts of Jammu & Kashmir (UT) and in all the districts of Uttarakhand, in Ajmer, Alwar, Baran, Bharatpur, Bhilwara, Bundi, Chittorgarh, Dausa, Dholpur, Jaipur, Jhalawar, Karauli, Kota, Sawai Madhopur, Sirohi, Tonk in East Rajasthan; Jalore

in West Rajasthan; in all districts of East Uttar Pradesh except Azamgarh, Chandauli, Farrukhabad, Fatehpur, Gonda, Hardoi, Jaunpur, Kanpur Dehat, Kaushambi, Mau, Mirzapur, Rai Bareilly, St. Ravidas Nagar, and Sonbhadra districts; in all districts of West Uttar Pradesh except Agra, Aligarh, Baghpat, Bulandshahar, GB Nagar, Gaziabad, Hapur, Jalaun, Mahamayanagar, Mahoba, Mathura, Rampur and Shamli districts; in all districts of Punjab except Bhatinda, Faridkot, Ferozepur, Mansa, Moga, Muktesar, Nawanshahar, in all districts of Haryana except Bhiwani, Faridabad, Fatehabad, Gurgaon, Hisar, Jhajjar, Palwal, Panchkula, Panipat, Rewari, Rohtak, Sirsa; in all districts of Delhi except Central Delhi, New Delhi, West Delhi, North West Delhi.

- **Advisories: Thunderstorm accompanied with lightning & gusty wind (speed 30-40 kmph)** very likely at isolated places over West Rajasthan on 7th, **Thunderstorm accompanied with lightning** at isolated places over Uttarakhand, Punjab, Haryana, Chandigarh and Delhi, Uttar Pradesh on 8th, over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh on 9th August, provide mechanical support to young fruit plants and vegetables and carry out propping up in sugarcane to prevent the crops from lodging due to strong winds. Keep harvested produce at safer places. Farmers are advised to avoid standing in the open or working in the field during thunderstorm period. Keep cattle/goats indoor during thunderstorm.
- As **rain/thundershowers** likely at **most/many places** over Himachal Pradesh, Uttarakhand during the period, over Uttar Pradesh Jammu & Kashmir (UT) and Ladakh (UT) from 8th to 11th, over Punjab, Haryana, Chandigarh and Delhi from 9th to 11th **along with heavy rainfall** at isolated places over Himachal Pradesh, Uttarakhand on 7th, **Heavy to very heavy rainfall** at isolated places over Uttarakhand and **heavy rainfall** at isolated places over Himachal Pradesh, Punjab, Haryana, Chandigarh and Delhi, Uttar Pradesh, East Rajasthan on **08 August**, **Heavy to very heavy rainfall** at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh. and **heavy rainfall** at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad (UTs), East Rajasthan on **09th**, **Heavy to very heavy rainfall** at isolated places over Himachal Pradesh, Uttarakhand, Haryana, Chandigarh & Delhi, Uttar Pradesh, East Rajasthan and **heavy rainfall** at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad (UTs), Punjab, West Rajasthan on **10th**, **Heavy to very heavy rainfall** at isolated places over East Rajasthan and **heavy rainfall** at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad (UTs), Himachal Pradesh, Haryana, Chandigarh & Delhi, Uttar P West Rajasthan, on **11th** August, avoid irrigation, intercultural operations and application of plant protection measures and fertilizers to the standing crops. Arrange for adequate drainage to avoid water stagnation in the crop fields. Drain out excess water from the fields of pulses, maize and vegetables.

UTs of Jammu & Kashmir and Ladakh

- In Sub-Tropical Zone, carry out earthing up operation in maize during clear weather. Carry out intercultural operations like thinning, weeding and hoeing in kharif pulses during clear weather. Carry out earthing up and weeding operations in turmeric at vegetative stage. Give proper support to the cucurbits plants. Avoid direct contact of cucurbits fruit with soil.
- In Intermediate Zone, carry out second hoeing and weeding in rice, 35 days after transplanting. Arrange for adequate drainage in kharif pulses fields to avoid water stagnation. Ensure staking with plastic string in tomato and cucurbits crops (bottle gourd, bitter gourd, sponge gourd and cucumber). For effective control of attack of cut worm in maize crop, spray Chlorpyrifos 20 EC @ 2 ml/litre of water or apply soil application of Carbofuron @ 1kg/kanal during clear weather conditions.
- In Valley Temperate Zone, carry out hand weeding in rice at vegetative stage. Maintain water level of 5 to 7 cm in rice fields. Carry out weeding in kharif pulses. Undertake land preparation for fresh plantation of saffron. Ensure deep ploughing to depth of 30 cm. In existing saffron fields, first hoeing should be

accompanied with racking. Avoid hoeing during wet weather to save corm rot. To avoid corm injury, mechanical hoeing to depth of 2-3 inches should be preferred over manual hoeing.

Himachal Pradesh

- In Sub Montane and Low Hills Sub Tropical Zone, undertake sowing of radish, carrot, broccoli and lettuce. Shoot and fruit borer is expected in brinjal and tomato crops; infested fruits and shoots should be collected and buried inside the soil. Install bird perches in tomato, pea, brinjal and gram crops to control fruit borer insect. Install pheromone trap @ 2-3 traps per acre of crop field for monitoring the fruit borer. Continue picking tea at 8-10 days interval to maintain the quality and productivity.
- In Mild Hills Sub Humid Zone, to monitor Fall army worm in maize, install pheromone traps @ 4 traps per acre. Destroy the mass of eggs and larvae by crushing them. If the infection is more than 10 percent, then spray neem seed kernel extracts @ 5ml/ litre or Chlorantraniliprole 18.5 SC @ 0.4 ml/litre or Emamectin Benzoate 5 SG @ 0.4 gram/litre or Spinetoram 11.7 SC @ 0.5 ml/litre.
- In High Hill Temperate Dry Zone, carry out weeding operation in potato and apply irrigation. After flowering stage in pea, spray Bavistin @ 0.25% to control white rot disease.
- In Mid Hills Sub Humid Zone, remove yellow and disease affected leaves from okra, capsicum, tomato and brinjal. Collect them and bury into deep pits away from the fields. Carry out hoeing and weeding operations in these crops. Keep the field neat and clean from bushes, weeds etc. If there is attack of mite in apple fruits, control it by spraying Fanejaquin 50ml or Propergite 200 ml per 200 litres of water in the orchards.

Punjab, Haryana, Delhi

- In Western Zone of Punjab, irrigate crops as per need. Due to prevailing humid weather conditions, farmers are advised to regularly monitor rice crop for fungal. Regularly monitor cotton crop for infestation of whitefly; if population reaches 6 whiteflies per leaf in the upper canopy, spray with 80g Ulala 50 WG (flonicamid) or 200g Polo in 125-150 litres of water/acre on clear days. Attack of jassid on bhindi can be reduced by spraying 40ml Confidor 17.8 SL (Imidacloprid) or 40g Actara 25 WG (Thiamethoxan).
- In Western Plain Zone of Punjab, apply need based irrigation in the paddy field. Weather is suitable for attack of stem borers in rice. If more than 5% dead hearts appears in the field then spray 20 ml Fame 480 SC or 170 g Mortar 75 SG or 350 ml of Marktriazol /Sutathion 40 EC or 560 ml Monocrotophos 36 SL or one litre of Chlorpyrifos 20 EC in 100 litres of water per acre
- In Undulating Plain Zone of Punjab, weather would be congenial for attack of leaf folder and plant hoppers in rice and basmati. Spray the crop with 20 ml Fame 480 SC (Flubendiamide) or 170g of Mortar 75 SG (Cartap hydrochloride) or one litre of Coroban/Durmet/Force 20 EC (Chlorpyrifos) in 100 litres of water per acre. For control of plant hopper spray 94 ml Pexalon 10 SC (Triflumezopyrim) or 120 g Chess 50 WG (Pymetrozine) or 40 ml Confidor 200 SL/Crocodyl 17.8 SL (imidacloprid) or 800 ml Ekalux/Quinguard/Quinalmass 25 EC (Quinalphos) in 100 litres of water per acre. Weather is favourable for attack of maize borer. Use tricho cards twice having 40,000 eggs of *Corcyra cephalonica* parasitized by *Trichogramma chilonis* per acre to control borer damage. Spray the crop with 30 ml Coragen 18.5 SC (chlorantraniliprole) using 60 litres water per acre with knap-sack sprayer @ 2-3 weeks after sowing as soon as borer injury to the leaves is noticed. Apply need based irrigation as per weather in maize, sugarcane and drain out excess rain water after rainfall.
- In Central Plain Zone of Punjab, undertake sowing of okra and cucurbits such as cucumber, bottle gourd, sponge gourd, pumpkin etc. In view of rainfall, apply only need based irrigation to cotton crop. To prevent the incidence of mealy bug on cotton crop, remove all the weeds growing around the crop fields and regularly monitor the crop. If symptoms of fungal foliar leaf spots are observed, spray the crop with 200 ml of Amistar Top in 200 litres of water per acre. Save the rice crop from sheath blight by keeping the bunds of the field clean; if the symptoms are observed, spray Galelio way@400ml or Nativo @80 g or Amistar Top/Tilt/Folicur/Pikapika@200ml in 200 litres of water per acre.

- In Western Zone of Haryana, looking at the possibility of light to moderate rainfall in the next three days, withhold irrigation and spraying in crops. Complete the transplanting of rice as the earliest. Keep vigil on root weevil in rice crop and if infestation occurs, apply 10 kg Karberil 4 G/Sevidal 4 G per acre, when weather remains clear. Also, keep vigil on white fly infestation in cotton crop; if infestation of white fly is above the economical threshold level (ETL), spray of 1 liter Nimbecidine mixed with 250 liter water per acre, when sky remain clear. Undertake hoeing /intercultural operations in guar/bajra. Apply recommended fertilizer dose in sorghum after rain and start cutting, if crop is ready. Prevailing high humidity and favourable temperature in the atmosphere may increase the infestation of sucking insect-pest in vegetables. Regularly monitor and spray as per university recommendation when sky remains clear.
- In Eastern Zone of Haryana, remove sugarcane infected by top borer from the field and spray systemic insecticide on the insect and drain out stagnant water from the field. Keeping weather in mind, this is a suitable time for sowing of spinach. Undertake transplanting or direct sowing of rainy season onion in the prepared fields. Undertake weeding and hoeing in the standing bajra crops. Withhold intercultural/hoeing operation and spraying in cotton crop. Monitor cotton crop for white fly attack; if population reaches 6 white flies per leaf in the upper canopy before 10 AM only then spray 80 g Ulala 50 WG/200g Polo in 125-150 litres of water per acre. Undertake sowing of fodder sorghum in prepared fields.
- In Delhi, maintain social distancing during picking of vegetables and other agricultural operations. Undertake weeding and hoeing in the standing crops and vegetables to protect them from weeds and proper drainage in all pulses, vegetables and other crops. Undertake transplanting or direct sowing of onion in the prepared fields and maintain proper drainage in the fields. Undertake sowing of guar (Pusa Navbahar, Durga Bahar), radish (Pusa Chetki), cluster bean (Pusa Komal), Beans (Pusa Sem 2, Pusa Sem 3), spinach (Pusa Bharti), amaranths (Pusa Lal Chaulai, Pusa Kiran) and ladyfinger (Pusa A-4) on ridges.

Uttar Pradesh:

- **In East Uttar Pradesh**, undertake intercultural operation in mung/urd field and in soybean after 25-30 days after sowing. This is the best time for plantation of Guava, Mango, Anola, Jackfruit and lime for new orchard. Continue sowing of guar, cluster bean, amaranthus and ladyfinger. In the paddy field, if plants started turning yellow i.e. top leaves turned yellow and bottom leaves remained green, farmers are advised to spray zinc sulphate solution (6.0 kg zinc sulphate dissolved in 300 litres of water / ha.) or zinc sulphate @25kg per hectare. Farmers are advised to give top dressing of urea in their spring sugarcane as per proper moisture is available in soil if not done yet & tying them to avoid lodging for fast growing sugarcane. Farmers are advised for making drainage channel in Maize, arhar, urd & mung field. Avoid stagnation of water in pulse crops.
- **In West Uttar Pradesh**, after weeding in 20 to 25 days old groundnut crops, do light hoeing after adding 100 kg of gypsum per hectare. For control of broad and narrow leaf weeds in paddy crop, Anilophos 30% EC may be applied within 2-3 days of transplanting. Undertake sowing of sesame, black gram, green gram. In maize crop, second weeding-hoeing after 35-40 days. In maize crop, first top dressing should be done 30 to 35 days after sowing and second top dressing after 40 to 45 days after sowing, top dressing of urea at the rate of 60 to 70 kg per hectare should be clear sky. In maize crop, there is a possibility of outbreak of stem borer / shoot fly pest, for control, apply Imamactin benzoate 5% Sg @ 4 g / ha or spray dimethoate 30% EC 1.0 liter / ha in 600-700 liters of water.

Animal Husbandry:

- There is possibility of foot and mouth disease and langra fever in cow/buffalo hence advised for vaccination at the earliest. Protect the poultry from moisture and dampness and provide proper lighting and maintain proper cleanliness.

Uttarakhand

- In Sub Humid Sub Tropic Zone, maintain 2.5 cm water level in rice fields where rice crop is at tillering stage. Spray neem-based insecticide (0.03%) @ 2 litres or Methyl Dimetone (25 EC) @ 1.5 litres per hectare for control of sucking pests in vegetables like chillies, brinjals, okra, bottle gourd, etc. Spray Zainab @ 2 grams per litre of water to prevent powdery mildew in pumpkin.
- In Bhabar and Tarai Zone, carry out weeding and hoeing operations in soybean. Postpone irrigation in

maize. In unirrigated (rainfed) mid hilly regions, make arrangement of seeds of an early variety of pea for sowing in mid of August; treat the seeds before sowing. Drain out excess water from capsicum and brinjal fields.

- In Hill Zone, carry out hand weeding in rice. Maintain proper water level. Remove grassy weeds surrounding the rice fields to prevent buildup of leaf folder. Drain out excess water from capsicum field.

Rajasthan

- In Flood Prone Eastern Plain Zone, sow daincha (sesbania) in fallow land for green manuring purpose.
- In Arid Western Plain Zone, for the planting of fruits plants, make pit of 1m x 1m x 1m size with mixing 20 kg FYM, 1kg SSP and 100gm Quinalphos powder.
- In Irrigated North Western Plain Zone, for the planting of fruits plants pit of 1m x 1m x 1m size with mixing 20 kg FYM, 1kg SSP and 100gm Quinalphos powder should ready.
- In Sub Humid Southern Plain and Aravali Hill Zone, spray of Emamectin benzoate 5 SG @ 0.4 g/l water or Chlorantraniliprol 18.5 SC 0.4 ml/l water or Spinosad 45 SC @ 0.3 ml / litre of water for the control of fall army worm in maize. Spray should done when sky is clear
- In Semi Arid Eastern Plain Zone, continue sowing of rainy season cucurbits like Khira, bottle gourd, ridge gourd, bitter gourd & cucumber. Treat seeds with Carbendazim 50 W.P. @ 2 gm per kg of seeds.

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 Agrometeorological Field Units.