

National Agromet Advisory Service Bulletin

Friday 12th June 2015

(For the period 12th to 16th June 2015)

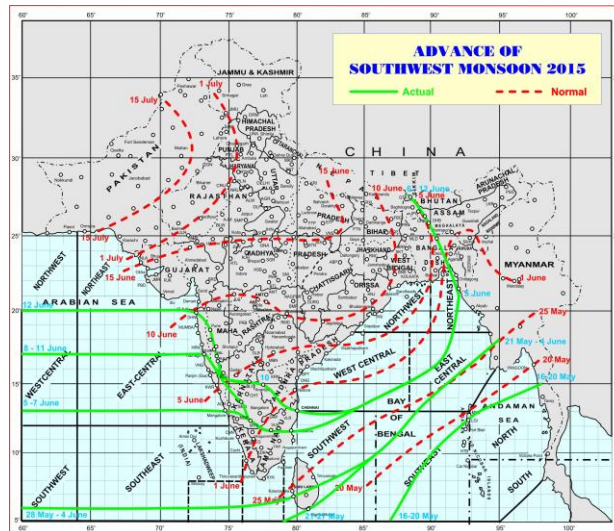


Issued by

**National Agrometeorological Advisory Service Centre,
Agricultural Meteorology Division,
India Meteorological Department, Shivajinagar, Pune.**

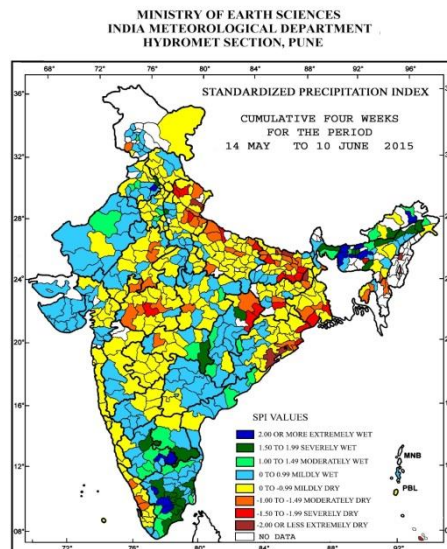


Monsoon Watch



- Southwest monsoon has further advanced into remaining parts of Central Arabian sea, remaining parts of Konkan (including Mumbai) and some parts of Madhya Maharashtra.
- The Northern Limit of Monsoon (NLM) passes through Lat. 20.0°N/Long. 60.0°E, Lat.20.0°N/Long. 70.0°E, Dahanu, Pune, Kolhapur, Bellary, Anantapur, Chennai, Lat. 13.0°N/Long. 84.0°E, Lat. 16.0°N/Long. 90.0°E, Lat. 21.0°N /Long. 92.0°E, Lat. 24.0°N /Long. 91.0°E, Dhubri and Gangtok.
- Conditions are favourable for further advance of southwest monsoon into remaining parts of Maharashtra, Karnataka, Andhra Pradesh, Bay of Bengal and Sikkim and some parts of north Arabian sea, south Gujarat state, Chhattisgarh, Odisha, West Bengal, Jharkhand and Bihar during next 5 days.

Standardised Precipitation Index Four Weekly for the Period 14th May to 10th June 2015



- Extremely/severely wet conditions experienced in many districts of Assam; few districts of Tamil Nadu; Amritsar, East Siang, Papumpara districts of Arunachal Pradesh; East Khasi Hills district of Meghalaya; Jalpaiguri districts of West Bengal; Baghpat district of Uttar Pradesh; Mohali, Fatehgarh Sahib districts of Punjab; Gadchiroli district of Maharashtra; Korba district of Chhattisgarh; Chittoor district of Andhra Pradesh; Bangalore Rural, Chitradurga, Kolar districts of Karnataka.
- Extremely/Severely dry conditions experienced in few districts of Uttarakhand; Nicobar district of Andaman & Nicobar Islands; Ri-Bhoi district of Meghalaya; East Kameng district of Arunachal Pradesh; Imphal East, district of Manipur; Kohima district of Nagaland; East Midnapore, North 24 Parganas districts of West Bengal; Balasore, Ganjam, Kendrapara, Khurda districts of Odisha; Godda, Khunti districts of Jharkhand; Banka, Bhagalpur, Jamui, Madhubani, Nawada, Saran, Sheohar districts of Bihar; Bahraich, Kushi Nagar Rampur districts of Uttar Pradesh; Dewas district of

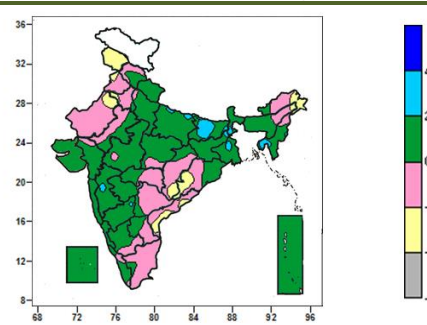
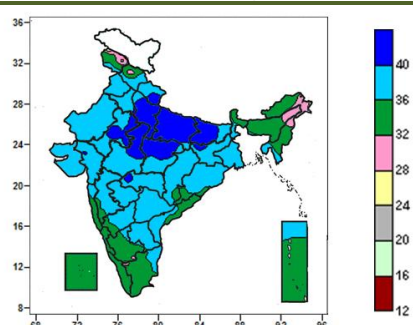
Madhya Pradesh; Jashpur, Raigarh districts of Chhattisgarh.

- Moderately dry conditions experienced in few districts of Bihar; Hailakandi district of Assam; Aizwal, Kolasib districts of Mizoram; Dhalai, South Tripura districts of Tripura; South Dinajpur, Hooghly, South 24 Parganas, West Midnapore districts of West Bengal; Cuttack, Jagatsinghpur districts of Odisha; Dumka, Ranchi districts of Jharkhand; Ambedkar Nagar, Banda, Faizabad, Kheri, Maharajanj, Sitapur, Bareilly, Moradabad, Pilibhit districts of Uttar Pradesh; Chamoli, Udham Singh Nagar of Uttarakhand; Rajouri district of Jammu and Kashmir; Jhalawar, Sawai Madhopur, Dausa districts of Rajasthan; Dhar, Indore, Mandasaur, Sehore, Narsinghpur districts of Madhya Pradesh; Akola district of Maharashtra; Surguja district of Chhattisgarh; Ernakulam, Kozhikode, Thrissur districts of Kerala
- Rest of the country experienced moderately wet/mildly dry/wet conditions.

Contour maps for Mean Maximum and Minimum Temperature and their anomaly for the week ending on 10.06.2015

Actual Mean Maximum Temperature (°C) in India for the week ending 10.06.2015

Mean Maximum Temperature (°C) Anomaly in India for the week ending 10.06.2015

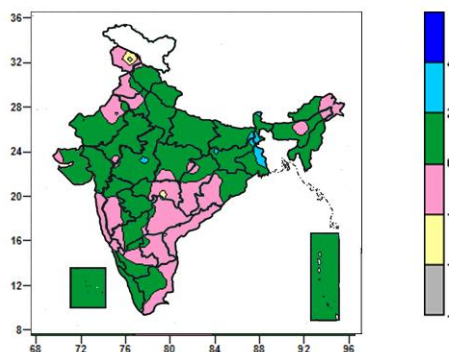
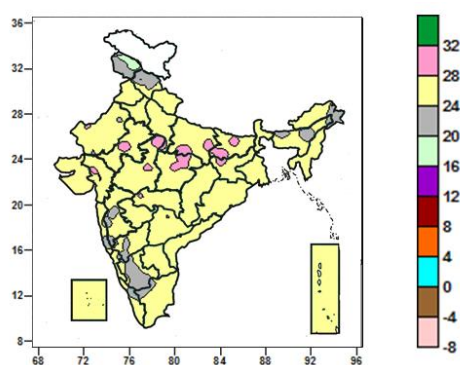


- Mean maximum temperature was above 40°C over many parts of Uttar Pradesh and Bihar, some parts of Uttarakhand, Madhya Pradesh, East Rajasthan and isolated pockets of Haryana & Delhi, Gujarat region, Vidarbha and Jharkhand.
- Mean maximum temperature ranged between 36 to 40°C over Punjab, West Rajasthan, Marathwada, Saurashtra and Kutch, Telangana, Rayalaseema and Tripura, many parts of Haryana & Delhi, Himachal Pradesh, Uttarakhand, East Rajasthan, Gujarat region, Jharkhand, Madhya Pradesh, Chhattisgarh, Odisha, West Bengal, Mizoram, Madhya Maharashtra, North Interior Karnataka, Coastal Andhra Pradesh, some parts of Bihar, Tamil Nadu, Andaman & Nicobar Islands and isolated pockets of Konkan, South Interior Karnataka.
- It was below 36°C over remaining parts of the country.

- Mean maximum temperature were above normal by 2 to 4°C over Tripura, some parts of Bihar and isolated pockets of East Uttar Pradesh, West Bengal, Madhya Maharashtra and Mizoram.
- Mean maximum temperature were below normal by 2 to 4°C over Jammu & Kashmir, some parts of Arunachal Pradesh, Odisha, Chhattisgarh, West Rajasthan, Coastal Andhra Pradesh and isolated pockets of Punjab, Haryana, Assam.
- It was normal to near normal in remaining parts of the country.

Actual Mean Minimum Temperature (°C) in India for the week ending 10.06.2015

Mean Minimum Temperature (°C) Anomaly in India for the week ending 10.06.2015



- Mean minimum temperature was 16 to 20°C over some parts of Jammu & Kashmir.
- Mean minimum temperature was 20 to 24°C over many parts of Jammu & Kashmir, Himachal Pradesh, South

- Mean minimum temperature was below normal by 2 to 4°C over isolated pockets of Jammu & Kashmir, and Vidarbha.
- Mean minimum temperature was above normal by 2 to

Interior Karnataka, some parts of Arunachal Pradesh, Assam & Meghalaya, Konkan & Goa, Madhya Maharashtra, Coastal & North Interior Karnataka, isolated pockets of Kerala and Tamil Nadu.

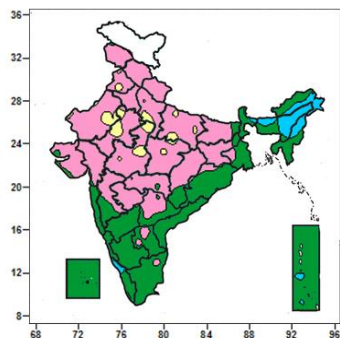
- Mean minimum temperature was above 24⁰C over rest of the country.

4⁰C over isolated pockets of Bihar, Jharkhand, West Bengal and West Madhya Pradesh.

- It was normal to near normal in remaining parts of the country.

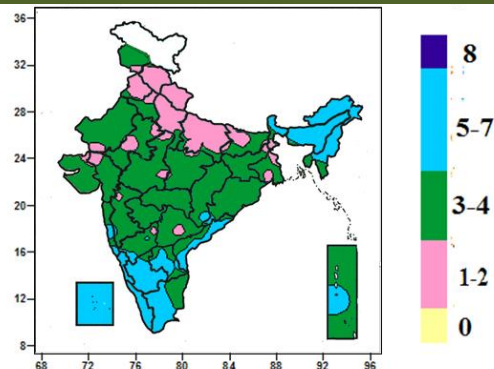
Contour maps for Relative Humidity, Cloud amount and Wind speed for the week ending on 10.06.2015

Relative Humidity (%) over India for the week ending 10.06.2015



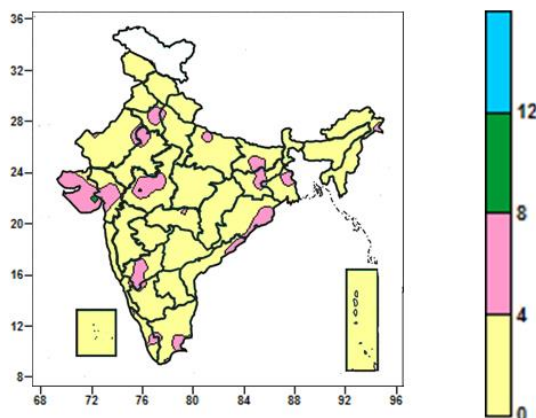
- Mean Relative humidity was above 80% over Nagaland and Meghalaya, many parts of Assam, Arunachal Pradesh, isolated pockets of Kerala, Sub-Himalayan West Bengal and Andaman & Nicobar Islands.
- Mean Relative humidity was 60 to 80% over Mizoram, Tripura, Manipur, Coastal Andhra Pradesh, Konkan & Goa, Karnataka, Lakshadweep, many parts West Bengal, Odisha, Rayalaseema, Tamil Nadu, Kerala, Andaman & Nicobar Islands, some parts of Arunachal Pradesh, Assam, Telangana, Chhattisgarh, Madhya Maharashtra and isolated pockets of Bihar, Jharkhand, Vidarbha, Saurashtra & Kutch.
- Mean Relative humidity was 20 to 60% over rest of the country.

Cloud amount (okta) over India for the week ending 10.06.2015



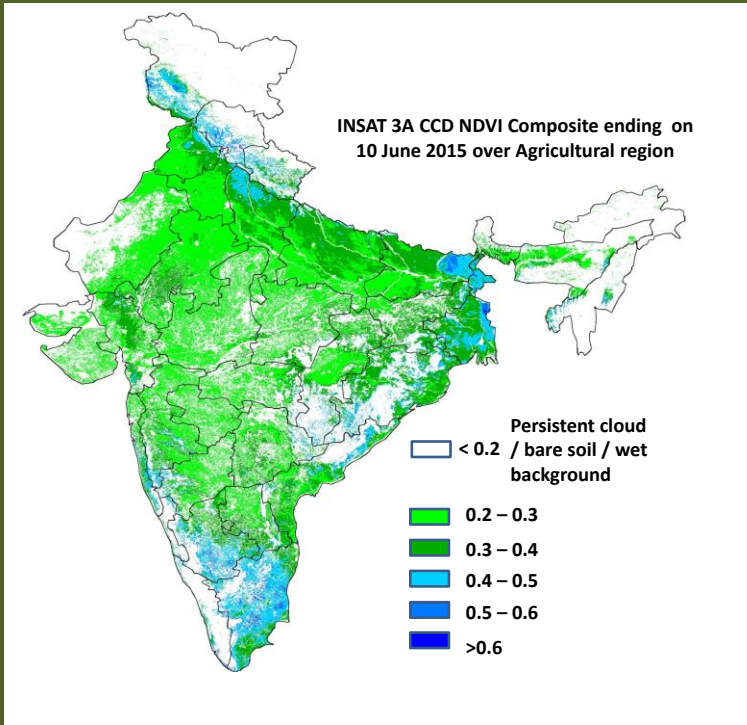
- Sky remained generally cloudy (5-7 okta) over Arunachal Pradesh, Sikkim, Nagaland, Manipur, Coastal Karnataka, Kerala and Lakshadweep, many parts of Assam & Meghalaya, Sub-Himalayan West Bengal, Coastal Andhra Pradesh, Rayalaseema, South Interior Karnataka, Tamil Nadu, some parts of Mizoram, Konkan & Goa, Andaman & Nicobar Islands and isolated pockets of Chhattisgarh, Odisha and North Interior Karnataka.
- Sky remained partly cloudy (3 to 4 okta) over Vidarbha, Marathwada, Tripura, many parts of Jammu & Kashmir, Haryana & Delhi, Rajasthan, Bihar, Jharkhand, Odisha, Gangetic West Bengal, Mizoram, Madhya Pradesh, Chhattisgarh, Madhya Maharashtra, Gujarat, Konkan & Goa, Telangana, North Interior Karnataka, some parts of Sub-Himalayan West Bengal, Rayalaseema and Tamil Nadu, isolated pockets of Punjab, Uttar Pradesh, Meghalaya, South Interior Karnataka.
- Sky remained mainly clear /clear sky (1 to 2/0 okta) over rest of the country.

Wind speed (knots) over India for the week ending 10.06.2015



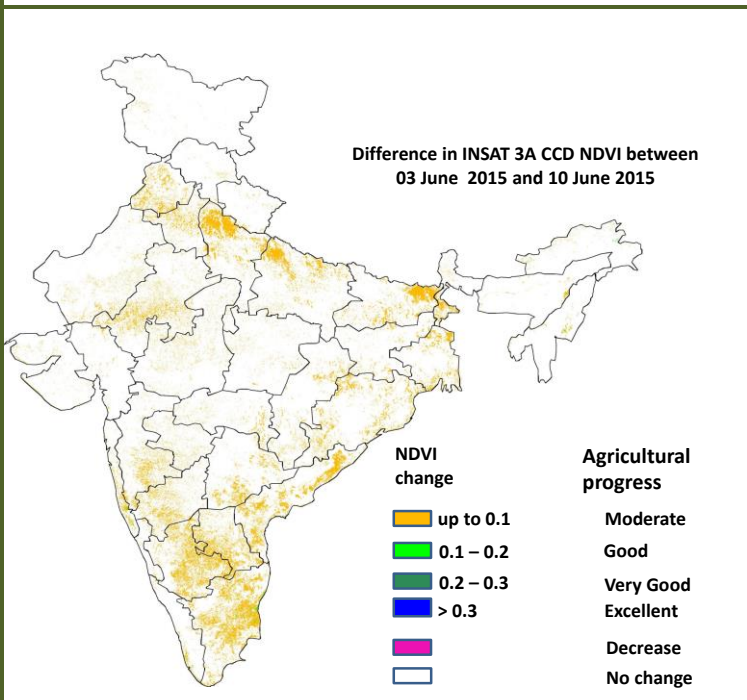
- Mean wind speed was 8 to 12 knots over isolated pockets of Saurashtra.
- Mean wind speed was 4 to 8 knots over many parts of Haryana & Delhi, Gujarat, some parts of Rajasthan, West Madhya Pradesh, Bihar, Jharkhand, Gangetic West Bengal, Odisha, North Interior Karnataka and isolated pockets of Uttar Pradesh, Coastal Andhra Pradesh, Tamil Nadu, Vidarbha and Kerala.
- It was less than 4 knots over rest of the country.

INSAT 3A CCD NDVI COMPOSITE ENDING ON 10th June 2015 OVER AGRICULTURAL REGION OF INDIA



- Agricultural vigour is very good in some parts of West Bengal, some pockets of east Bihar and South Interior Karnataka, where NDVI varies from 0.4 to 0.6. Agricultural growth was good over most parts of Uttar Pradesh and Bihar and some parts of Punjab and Haryana (NDVI: 0.3 - 0.4). NDVI remains within the range of 0.2 to 0.3 over rest parts of India.

Difference in INSAT 3A CCD NDVI between 3rd June 2015 and 10th June 2015



- No change in NDVI was observed over West Rajasthan and West Uttar Pradesh, Madhya Pradesh, Maharashtra, Gujarat, West Bengal and Odisha. Moderate progress (up to 0.1) in NDVI was observed in northeast Uttar Pradesh, parts of Bihar, South Interior Karnataka, Andhra Pradesh, Telangana, Rayalaseema, some parts of Punjab and Haryana.

- INSAT 3A CCD NDVI composite maps for the week ending on 10th June 2015 for different States are given below in Annexure II.

Weather Forecast for next 5 days valid upto 0830 hours of 17th June 2015

- Fall in day temperatures by 2-3°C over plains of northwest and adjoining west & central India during next 2-3 days.

5 Day Rainfall Forecast (MORNING)

12 June 2015

Met Sub-divisions	12 June	13 June	14 June	15 June	16 June
1. Andaman & Nicobar Islands	SCT	SCT	FWS	FWS	WS
2. Arunachal Pradesh	WS	WS	WS	FWS	FWS
3. Assam & Meghalaya	WS	WS	WS	WS	WS
4. N. M. M. & T.	WS	FWS	FWS	FWS	FWS
5. S.H. West Bengal & Sikkim	FWS	FWS	WS	WS	WS
6. Gangetic West Bengal	SCT	SCT	FWS	FWS	FWS
7. Orissa	SCT	SCT	SCT	FWS	FWS
8. Jharkhand	SCT	SCT	SCT	FWS	FWS
9. Bihar	SCT	SCT	FWS	FWS	FWS
10. East Uttar Pradesh	ISOL	ISOL	ISOL	SCT	SCT
11. West Uttar Pradesh	ISOL	ISOL	SCT	SCT	SCT
12. Uttarakhand	ISOL	SCT	SCT	SCT	SCT
13. Haryana, Chd & Delhi	ISOL	ISOL	SCT	SCT	SCT
14. Punjab	ISOL	ISOL	SCT	SCT	SCT
15. Himachal Pradesh	ISOL	SCT	SCT	SCT	SCT
16. Jammu & Kashmir	ISOL	SCT	SCT	ISOL	ISOL
17. West Rajasthan	ISOL	ISOL	ISOL	ISOL	ISOL
18. East Rajasthan	ISOL	ISOL	SCT	SCT	SCT
19. West Madhya Pradesh	FWS	FWS	SCT	SCT	SCT
20. East Madhya Pradesh	SCT	SCT	SCT	FWS	FWS
21. Gujrat Region	FWS	SCT	SCT	SCT	SCT
22. Saurashtra & Kutch	ISOL	ISOL	SCT	SCT	SCT
23. Konkan & Goa	WS	WS	WS	FWS	WS
24. Madhya Maharashtra	FWS	FWS	FWS	FWS	FWS
25. Marathwada	FWS	FWS	FWS	FWS	FWS
26. Vidharbha	SCT	SCT	SCT	FWS	FWS
27. Chhattisgarh	SCT	SCT	SCT	SCT	SCT
28. Coastal Andhra Pradesh	SCT	FWS	FWS	FWS	FWS
29. Telangana	FWS	FWS	FWS	FWS	FWS
30. Rayalaseema	SCT	SCT	SCT	FWS	FWS
31. Tamilnadu & Puducherry	ISOL	ISOL	ISOL	ISOL	ISOL
32. Coastal Karnataka	FWS	FWS	WS	WS	WS
33. North Interior Karnataka	FWS	FWS	FWS	FWS	FWS
34. South Interior Karnataka	FWS	FWS	FWS	FWS	FWS
35. Kerala	FWS	FWS	FWS	WS	WS
36. Lakshadweep	FWS	FWS	FWS	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 5 days

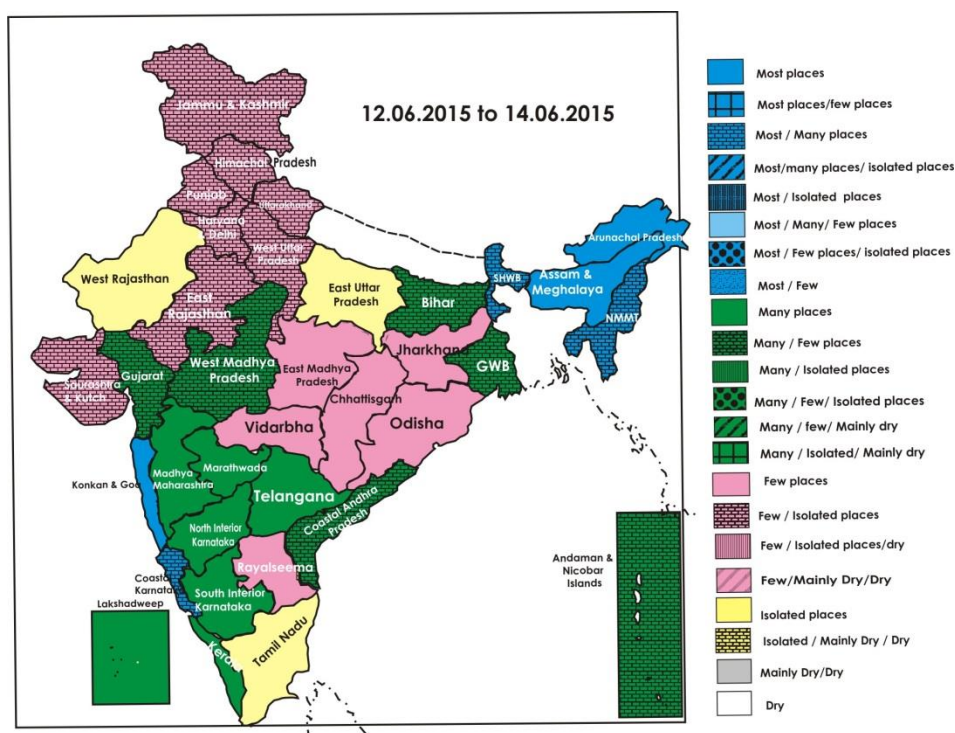
- 12 June (Day 1):** Heavy to very heavy rainfall would occur at a few places with extremely heavy fall at isolated places over Assam & Meghalaya. Heavy to very heavy rainfall would occur at isolated places over Sub-Himalayan West Bengal & Sikkim and Arunachal Pradesh and heavy at isolated places over Nagaland, Manipur, Mizoram & Tripura. Thunderstorm accompanied with squall would occur at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Rajasthan, Uttar Pradesh, Bihar, Jharkhand, Odisha, Gangetic West Bengal and Telangana.
- 13 June (Day 2):** Heavy to very heavy rainfall would occur at isolated places over Assam & Meghalaya. Heavy rainfall would occur at isolated places over Arunachal Pradesh, Sub-Himalayan West Bengal & Sikkim and Nagaland, Manipur, Mizoram & Tripura.

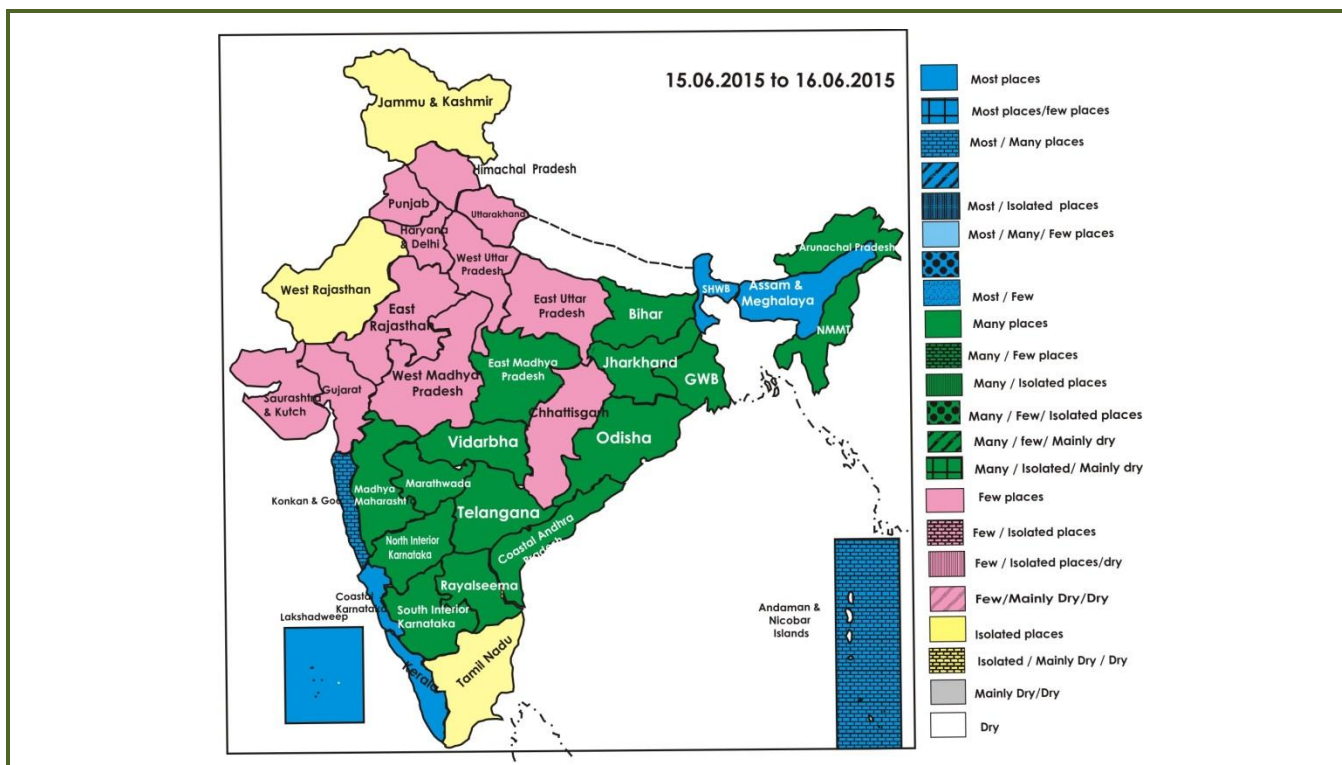
- **14 June (Day 3):** Heavy to very heavy rainfall would occur at isolated places over Assam & Meghalaya. Heavy rainfall would occur at isolated places over Arunachal Pradesh, West Bengal & Sikkim, Konkan & Goa, Coastal & South Interior Karnataka and Kerala.
- **15 June (Day 4):** Heavy to very heavy rainfall would occur at isolated places over Assam & Meghalaya. Heavy rainfall would occur at isolated places over Arunachal Pradesh, West Bengal & Sikkim, Konkan & Goa, Coastal & South Interior Karnataka and Kerala.
- **16 June (Day 5):** Heavy to very heavy rainfall would occur at isolated places over Konkan & Goa, Arunachal Pradesh and Assam & Meghalaya. Heavy rainfall would occur at isolated places over Andaman & Nicobar Islands, Sub-Himalayan West Bengal & Sikkim, Jharkhand and Coastal Karnataka.

Weather Outlook for subsequent 2 days from 17th June 2015 to 19th June 2015

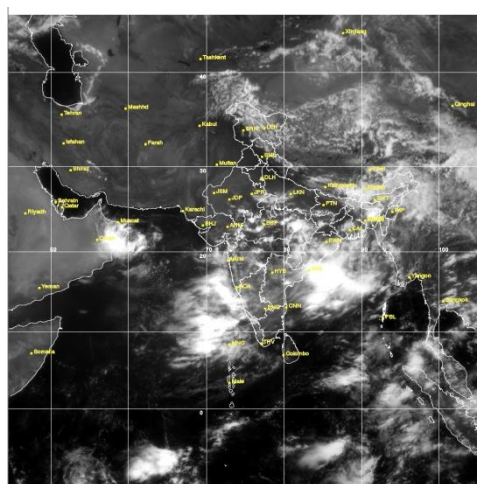
- Rain/thundershowers would occur at most places over northeastern states and West Bengal & Sikkim with isolated heavy to very heavy falls. Rain/thundershowers would occur at many places over Bihar, Jharkhand and Odisha.
- Rain/thundershowers would occur at many places along west coast with isolated heavy falls and at a few places over rest peninsular India.
- Rain/thundershowers would occur at isolated places over Western Himalayan region and plains of northwest India.

Weather Forecast Map (Valid upto 0830 hours of 17th June, 2015)





Satellite image dated, 12.06.2015 0745 UTC



Salient Advisories

Advisories for Rainfall/Heavy rainfall

- Due to very heavy rainfall, flood is reported in Sonitpur, Darrang and Lakhimpur districts of **Assam**. Drain out excess water from jute, sugarcane and banana crop fields. Postpone nursery bed preparation and sowing of *Sali/kharif* rice and sowing of red gram.
- As rain/thundershowers would occur at most/many places over **Assam & Meghalaya**, along with heavy to very heavy rainfall at isolated places during the period, postpone sowing of *kharif* crops, inter-cultural operation and application of plant protection measures and fertilizers to the standing crops. Provide adequate drainage in standing crops to avoid water stagnation.
- As rain/thundershowers would occur at most/many places over **Sub-Himalayan West Bengal & Sikkim** during the period along heavy/heavy to very heavy rainfall at isolated places, undertake nursery preparation for vegetables like early cauliflower and brinjal and nursery preparation of *Aman* rice after current spells of heavy rain. Provide adequate drainage in standing crops to avoid water stagnation.

Advisories for Thunderstorm/Squall

- As thunderstorm accompanied with squall would occur at isolated places over **Jharkhand, Odisha, Bihar** and **Gangetic West Bengal** on 12th June, provide mechanical support to vegetables and young fruit plants to prevent

the crops from lodging due to strong winds. Also undertake propping in sugarcane in Jharkhand, Bihar and Odisha.

- As thunderstorm accompanied with squall would occur at isolated places over **Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Rajasthan** and **Uttar Pradesh** on 12th June, provide mechanical support to vegetables and young fruit plants to prevent the crops from lodging due to strong winds. Also undertake propping in sugarcane.

Other Salient Advisoires

- In **Kerala**, continue transplanting of *virippu* rice in Southern and Central Zones, in the Problem Area Zone, continue land preparation and wet seeding of rice (Uma variety) and continue planting of turmeric and banana in Northern Zone.
- In Central Brahmaputra Valley Zone and North Bank Plain Zone of **Assam**, continue nursery bed preparation for *sali/kharif* rice after current spells of heavy rain.
- In **Konkan**, continue nursery sowing of rice and finger millet. Continue land preparation and sowing of finger millet, vegetables and pulses.
- In **Madhya Maharashtra**, continue land preparation of *kharif* rice nursery in Kolhapur region and western ghat region. Continue land preparation and sowing of jowar, soyabean in Kolhapur region.
- In **Marathwada**, as rain/thundershowers is expected at many places, continue sowing of irrigated cotton. Continue land preparation and sowing of green gram, black gram, red gram.
- Continue nursery sowing of rice in **Coastal Karnataka**, land preparation and nursery sowing of rice, sowing of ragi, maize, groundnut and redgram in **South Interior Karnataka** and sowing of greengram, blackgram, jowar, soybean and pigeonpea in **North Interior Karnataka**.
- In **Coastal Andhra Pradesh**, undertake nursery sowing of rice and land preparation for sowing of sesame, maize, pulses, cotton, black gram, finger millet and for planting of rainfed sugarcane. In **Rayalaseema**, undertake land preparation for sowing of kharif groundnut, chilli and maize utilizing the realised and expected rainfall.
- Undertake land preparation for sowing of cotton, maize, groundnut, jowar, soybean, pulses, castor, pigeon pea, green gram etc. in **Telangana**.
- As rain/thundershowers would occur at many places over **West Madhya Pradesh** on 12th & 13th June and over **East Madhya Pradesh** on 15th and 16th June, continue sowing of maize and redgram and land preparation for sowing of soybean and groundnut in Satpura Plateau Zone. Also undertake sowing of black gram, green gram and nursery preparation for rice and *kharif* vegetables utilizing the expected rainfall.

Detailed Zonewise Agromet Advisories

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



Land preparation/Sowing

Sugarcane

Chilli

Rice Nursery

- **Realised Rainfall:** Rainfall occurred in all districts of Kerala and Coastal Karnataka; Belagavi, Dharwad and Yadgir districts of North Interior Karnataka; Chikkamagaluru, Kodagu, Mysuru, Ramanagara and Shivamogga districts of South Interior Karnataka; Dindigul, Karur and Madurai districts of Tamil Nadu; East Godavari, Guntur, Vishakapatnam, Vizianagaram and West Godavari districts of Coastal Andhra Pradesh; Nalgonda and Warangal districts of Telangana. Weather remained mainly dry over rest of the region.
- **Advisories:**
 - **Andhra Pradesh:**
 - In North Coastal Zone, continue sowing of groundnut, sesame and mesta.
 - Continue sowing of irrigated cotton, okra and cluster beans and land preparation for sowing of irrigated groundnut, castor and maize in Anantapur district in the Scarce Rainfall Zone. Undertake sowing of *korra* in black soil and continue sowing of maize in Kurnool district.
 - Continue land preparation for sowing of rice, maize, pulses and cotton in Krishna Godavari Zone utilizing the expected rainfall.
 - In High Altitude Tribal Zone, continue land preparation for sowing of maize and finger millet and nursery sowing of

rice. Continue sowing of *kharif* groundnut and rice in Southern Zone.

- Prevailing humid weather conditions are congenial for incidence of sucking pests in summer Bt cotton in the Scarce Rainfall Zone. To control, undertake stem application of Imidachloprid @1: 20 of chemical and water made into a paste at 20,40,60 DAS after current spells of rain.

▪ **Telangana:**

- As thunderstorm accompanied with squall would occur at isolated places over Telangana on 12th June, provide mechanical support to young fruit plants, banana and vegetables and undertake propping in sugarcane to prevent the crops from lodging due to strong winds.
- Undertake land preparation for sowing groundnut, jowar, soybean, pulses, castor, pigeon pea and digging of pits for planting new orchards in Southern Telangana Zone.
- Undertake land preparation for sowing of rice, maize and cotton (irrigated and rainfed) in the Northern Telangana Zone.
- Incidence of mite is noticed in sweet oranges in Southern Telangana. To control, spray Wettable Sulphur @ 3 g or Dicofol @ 5 ml or Propargite @ 2 ml per litre of water after current spells of rain.

▪ **Karnataka:**

- Continue nursery sowing of rice in Coastal Zone.
- Undertake land preparation and sowing of greengram, blackgram, jowar, soybean and pigeonpea in the North East Transition Zone utilizing the expected rainfall.
- Continue land preparation and sowing of maize, green gram, black gram, groundnut, cotton and soybean in North Transition Zone with the likely rainfall. Continue land preparation and sowing of ragi and red gram in the Eastern Dry Zone and land preparation for sowing of sorghum in Central Dry Zone.
- As heavy rainfall would occur at isolated places over Coastal Karnataka from 14th to 16th and over South Interior Karnataka on 14th and 15th June, provide adequate drainage in standing crops to avoid water stagnation in the crop fields.
- Continue land preparation and sowing of rice, cotton, ginger and turmeric in Hill Zone utilizing the expected rainfall.
- Undertake nursery sowing of rice and sowing of ragi, maize, groundnut and redgram in Southern Transition Zone and land preparation for sowing of greengram, blackgram and pigeon pea in the North East Dry Zone.
- Continue land preparation and sowing of *kharif* crops like green gram, sunflower, maize, Bt. cotton, red gram(short duration varieties), bajra, sesamum and groundnut (bunch type) in North Dry Zone utilizing the expected rainfall.
- In the prevailing temperature and humidity, leaf spot/Sigatoka and Panama wilt incidence may occur on Banana in Southern Transition Zone. As a precautionary measure, drench with Carbandizim 0.2% or Propiconazole 0.5 ml/ litre after current spells of rain and repeat once in a month.

▪ **Kerala:**

- Continue transplanting of *virippu* rice and planting of coconut and pineapple in the Southern and Central Zone. Complete planting of new rubber saplings. In Problem Area Zone, continue wet seeding of rice (Uma variety), planting of coconut saplings and bananas.
- As heavy rain is expected at isolated places, provide adequate drainage in rice nurseries and vegetable fields.
- Prevailing temperature and humidity is congenial for incidence of Erwinia rot and Panama wilt diseases on Banana in Problem Area Zone. For control, drench the pit with Steptocycline @ 2 g with 10 litres of water for Erwinia rot and for panama wilt ,mix Copper Oxy Chloride @ 3 g with 1 litre water and drench the pit after current spells of rain.
- Due to high relative humidity, there is a chance of sheath blight, sheath rot and leaf spot diseases in rice nursery in the Central Zone. To control, dip the roots of seedling in *Pseudomonas* solution by mixing 20g *Pseudomonas* culture in one litre of water for 30 minutes while transplanting.
- Due to prevailing humid weather, there is possibility of occurrence of bunchy top disease in banana in the Southern Zone. Disease affected plants must be uprooted and burnt. As a control measure against the vector, spray Rogor @1.5 ml/litre of water after current spells of rain.

▪ **Tamil Nadu:**

- Continue nursery preparation and sowing of *Kuruvai* rice in the Cauvery Delta Zone and continue sowing of green manure crops like daincha, sunhemp and kolangi.
- Undertake sowing of irrigated maize and sunflower and transplanting of short duration rice varieties in the Western Zone. Since, high wind are anticipated, undertake propping in early season sugarcane and provide support to 5 months old banana crops against lodging.
- Undertake sowing of green gram under irrigated conditions in the South Zone.
- Undertake planting of wetland banana in the High Rainfall Zone.
- Due to prevailing humid weather blast incidence is noticed in the summer rice.To control, undertake spraying of Carbendazim 200 gms/acre or Tricylazole @ 200 gms/acre in 200 litres of water in Cauvery Delta Zone.
- In Karaikal and Puducherry, due to prevailing humid weather, there is chance of blast incidence in transplanted rice. Spray Hinosan @ 200 ml/ac or Tricyclazole @ 200g/ac and prophylactic spray of *Pseudomonas* talc powder formulation @ 500 g/ac in 200 litres of water during late evening hours.
- Prevailing cloudy weather and light to moderate rains are congenial for incidence of thrips and other sucking pests in cotton in the Southern Zone. To control, spray Imidacloprid 200SL @ 100ml/ha.
- Suitable varieties for sowing are given in Annexure III.

- **Animal Husbandry**

- High humidity along with high temperature causes more stress to animals in the North Eastern Zone of Tamil Nadu. To reduce stress, provide adequate ventilation in the animal sheds and high yielding cows should be fed with good quality concentrate and roughage by incorporating leguminous fodder/hay.
- Prevailing weather conditions are congenial for Enterotoxaemia in livestock in Northern Telangana and sheep pox in sheep in Southern Telangana. To prevent the diseases, vaccinate the animals.
- Vaccinate the livestock for Black Quarter and Foot and Mouth diseases in the North East Dry Zone.

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



Land preparation/Sowing

Banana

Okra

Cabbage

- **Realised Rainfall:** Rainfall occurred in all districts of Arunachal Pradesh except Anjaw, Dibang Valley, Kurung Kumey, Lower Subansari and Upper Subansari; all districts of Assam except Darrang, Karbi Anglong, Morigaon and Nagaon; all districts of Meghalaya except Ri-Bhoi; North Tripura district of Tripura. Weather remained mainly dry over rest of the region.

- **Advisories:**

- As rain/thundershowers would occur at most/many places over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura along with heavy to very heavy rainfall at isolated places over Assam & Meghalaya and heavy rainfall at isolated places over Arunachal Pradesh during the period and over Nagaland, Manipur, Mizoram & Tripura on 12th and 13th June, postpone intercultural operation and application of plant protection measures and fertilizers to the standing crops. Provide adequate drainage in standing crops to avoid water stagnation in the fields.
- **Assam & Meghalaya, Arunachal Pradesh:**
 - Due to very heavy rainfall, flood is reported in Sonitpur, Darrang and Lakhimpur districts of Assam. Drain out excess water from jute, sugarcane and banana crop fields.
 - In Assam & Meghalaya and Arunachal Pradesh, continue nursery bed preparation and sowing of *Sali/kharif* rice after current spells of heavy rain.
 - In Hill Zone of Assam, undertake sowing of arhar (red gram) after current spells of heavy rain.
 - In Lower Brahmaputra Valley Zone of Assam, continue planting of lemon after current spells of heavy rain.
 - In Barak Valley Zone of Assam, continue planting of banana and lemon after current spells of heavy rain.
 - In Meghalaya, continue sowing of soybean, groundnut, black gram, green gram and red gram after current spells of heavy rain.
 - In Hill Zone of Assam, due to humid weather condition, there is chance of shoot borer in khasi mandarin. Spray of Monocrotophos 0.04% or Phosphamidon 0.03% to control the pest after current spells of heavy rain.
 - In Barak Valley Zone of Assam, due to high temperature and high relative humidity, there is chance of attack leaf eater in summer vegetables, ridge gourd, bitter gourd, cucumber and sponge gourd. Spray Malathion @ 1ml/litre of water to manage the attack after current spells of rain.
 - In Arunachal Pradesh, in the humid weather condition, there is chance of attack of aphids in ladies finger and Red pumpkin beetle in cucurbits. Spray Imidacloprid 17.5 SL @ 1ml/10 litres of water for control of aphids and spray Deltamethrin @ 4ml/10 litre of water for management of Red pumpkin beetle after current spells of rain.
 - In Meghalaya, high relative humidity is favourable for attack of shoot and fruit borer in brinjal. Spray Neem Kernal Extract 5% to manage the attack after current spells of rain.
- **Manipur, Mizoram, Nagaland and Tripura:**
 - In Manipur, continue nursery raising of *kharif* rice and land preparation of main fields for transplanting of *kharif* rice. Complete sowing of *kharif* maize and continue sowing soybean, groundnut and black gram and nursery raising of cauliflower after current spells of heavy rain. Maintain water level at 5-8 cm in pre-*kharif* rice at grain filling stage.
 - In Nagaland, continue land preparation for sowing of maize after current spells of heavy rain. Continue nursery bed preparation for lowland rice.
 - In Mizoram, continue land preparation for planting of ginger and turmeric and sowing of maize after current spells of heavy rain. Undertake field preparation and transplanting of rice.
 - In Tripura, continue sowing of maize in upland and medium uplands. Undertake nursery preparation of *aman* rice and planting of banana.
 - In Nagaland, high humidity favours attack leaf eating caterpillars in cucurbits. Apply Neem oil @ 5ml/litre of water for control after current spells of rain.
 - Suitable varieties are given in Annexure III.

- **Animal Husbandry**

- In Northeastern states, keep animals indoor during heavy rainfall period. Also keep animal sheds dry and avoid dampness during rainy days. Also undertake regular immunization of cattle & buffaloes against Foot & Mouth disease, Haemorrhagic Septicaemia & Black Quarter. Vaccinate pigs against swine fever, poultry against RD and IBD.
- In Meghalaya, due to humid weather, keep the poultry house well ventilated during day time and provide clean and fresh drinking water every day.

- **Fishery**

- In Central Brahmaputra Valley Zone and North Bank Plain Zone of Assam, prepare the fingerling rearing tanks and nurseries by cleaning them and applying agricultural lime for raising fingerlings. Apply cowdung at the rate of 500 gm per sq m. at least 15 days ahead of releasing fingerlings into the tanks. Farmers may release fish prawn in their ponds during this period.

WEST INDIA [GOA, MAHARASHTRA, GUJARAT]



Banana

Sugarcane

Groundnut

Land preparation/Sowing

- **Realised Rainfall:** Rainfall occurred in North Goa, South Goa, Ratnagiri and Sindhudurg districts of Konkan & Goa; Kolhapur, Pune, Sangli and Satara districts of Madhya Maharashtra and Gadchiroli district of Vidarbha; Dangs, Valsad, Daman and Dadra & Nagar Haveli districts of Gujarat Region. Weather remained mainly dry over rest of the region.

- **Advisories:**

- **Maharashtra:**

- In Konkan, continue nursery sowing of rice and finger millet. Continue land preparation for direct sowing of finger millet, vegetables and pulses. As heavy rainfall would occur at isolated places over Konkan 14th to 16th June, provide adequate drainage in rice and finger millet nurseries to avoid water stagnation in the crop fields.
- In Madhya Maharashtra, continue land preparation of *kharif* rice nursery in Kolhapur region and western ghat region. Continue land preparation and sowing of jowar, soyabean in Kolhapur region.
- In Marathwada, as rain/thundershowers is expected at many places, continue sowing of irrigated cotton. Continue land preparation and sowing of green gram, black gram, red gram.
- In Vidarbha, undertake land preparation and sowing of *kharif* cotton, soybean and redgram utilising the expected rainfall.

- **Gujarat:**

- Continue nursery bed preparation for sowing of *kharif* rice (GNR-2 (Coastal region), GNR-3, 4, Gurjari, NAUR-1, IR-28, Jaya) and land preparation for sowing of pulses (black gram, green gram, cowpea, pigeon pea) in South Gujarat Heavy Rainfall Zone utilising the expected rainfall.
- In Middle Gujarat Zone, continue land preparation for sowing of groundnut (GG-3), ginger (Athira) and turmeric. Keep inputs ready for *kharif* sowing. Undertake harvesting of okra in clear weather.
- In Bhal and Coastal Zone, continue land preparation / undertake sowing of B.T. cotton utilising the available soil moisture and expected rainfall; procure the seeds of high yielding varieties of B.T. hybrid Cotton or Govt. approved varieties of B.T. cotton.
- In Bhal and Coastal Zone, North West Zone and North Gujarat Zone, complete picking of matured pods of green gram; harvesting of pearl millet, fodder sorghum, vegetable and matured fruits on bright sunny days and keep harvested produce in safe place.
- In North Gujarat Zone, continue land preparation sowing of irrigated *kharif* groundnut. Continue sowing of groundnut in North Saurashtra Zone, sowing of irrigated B.T. cotton in South and North Gujarat Zone, Middle Gujarat Zone and North West Zone; continue land preparation for sowing of *kharif* groundnut and cotton in Saurashtra and for *kharif* cotton in South Gujarat Zone.
- Suitable varieties for sowing are given in Annexure III.

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



Sugarcane

Jute

Land preparation/Sowing

Onion

- **Realised Rainfall:** Rainfall occurred in South Andaman district of Andaman & Nicobar Islands; all districts of Sub-Himalayan West Bengal & Sikkim except Malda, North Dinajpur and South Dinajpur; Kishanganj district of Bihar; Gumla and Lohardagga districts of Jharkhand; Angul, Gajapati, Kandhamal, Korapur, Malkangiri, Nawapara and Nawarangpur districts of Odisha. Weather remained mainly dry over rest of the region.

- **Advisories:**

- As thunderstorm accompanied with squall would occur at isolated places over Jharkhand, Odisha, Bihar and Gangetic West Bengal on 12th June, provide mechanical support to vegetables and young fruit plants to prevent the crops from lodging due to strong winds. Also undertake propping in sugarcane in Jharkhand, Bihar and Odisha.

- **West Bengal:**

- As heavy/heavy to very heavy rainfall would occur at isolated places over Sub-Himalayan West Bengal & Sikkim during the period, provide adequate drainage in standing crops to avoid water stagnation in the fields.
- In Coastal Saline Zone of West Bengal, continue sowing of dry seeded rice after proper tillage operation like ploughing, weeding etc.
- In Laterite and Red soil Zone, continue land preparation for sowing the rice crop under upland condition.
- In Old Alluvial Zone and Terai Zone of West Bengal, undertake nursery preparation for vegetables like early cauliflower and brinjal after current spells of heavy rain and continue the nursery preparation of *Aman* rice.
- In Hill Zone of West Bengal, continue land preparation for sowing of soybean after current spells of heavy rain.
- High temperature and humidity can influence the stemrot disease of Pointed gourd. To control the attack of stem rot, apply Bavistin or Benlate @ 1gm per liter of water. Also there is chance of attack of fruit borer in mango. To control these insects, spray Dichlorovos @ 1.5 – 2.0 ml per litre of water, Apply the chemicals after current spells of rain.
- In New Alluvial Zone, Laterite and Red soil Zone of West Bengal, due to high temperature and humid weather, there is chance of attack of stem weevil in jute. Spray Dimethoate @ 2 ml or Carbaryl @ 2 g/litre of water after current spells of rain.

- **Andaman and Nicobar Islands:**

- As rain/thundershowers would occur at most/many places over Andaman and Nicobar Islands from 14th to 16th June, postpone irrigation, inter-cultural operation and application of plant protection measures and fertilizers to the standing crops. Provide adequate drainage in vegetable fields.

- **Odisha:**

- In East and South Eastern Coastal Plain Zone, undertake direct seeding of rice in medium low and deep low lands. In uplands, undertake land preparation for sowing of non-paddy crops such as cotton, groundnut, castor, cotton and arhar and undertake sowing after receipt of fair amount of rainfall (around 100 mm cumulative rainfall).
- In Western Undulating Zone, undertake nursery sowing of rice, sowing of maize, cotton and arhar and land preparation for sowing of *kharif* pulses in upland areas.
- In East and South Eastern Coastal Plain Zone, fruit and shoot borer in brinjal has been noticed and likely to increase in the present weather. To control, install Pheromone traps and spray Sevin WP @ 4 g or Malathion @ 2 ml /litre of water after current spells of rain..
- In the prevailing temperature condition, early stem borer infestation may become severe in sugarcane in North Eastern Ghat Zone. If it crosses the ETL level (5% dead heart), apply Phorate @ 4 kg or Carbofuran @ 12 kg after current spells of rain. followed by earthing up.

- **Bihar:**

- In North East and North West Alluvial Plain Zone, continue nursery preparation for *kharif* rice and onion and continue planting of yam, ginger & turmeric. Undertake land preparation and sowing of *kharif* maize.
- In South Bihar Alluvial Zone, continue nursery sowing of *kharif* rice and undertake harvesting of sweet potato.
- In South Bihar Alluvial Zone, due to high temperature, apply irrigation at regular intervals in sugarcane, summer maize, green gram and summer vegetables.
- In North East Alluvial Zone, in the present temperature conditions, there is chance of attack of red pumpkin beetle in cucurbitaceous vegetables. For control, apply Folidol @ 2g/Kg of ash or by spraying of Folidol @ 2g/litre of water after current spells of rain.

▪ **Jharkhand:**

- In South Eastern Plateau Zone & North Eastern plateau Zone, undertake inter or mixed cropping of arhar with maize/groundnut/gora rice/Soybean/urd bean.
- In South Eastern Plateau Zone, continue nursery bed preparation for long (140-150 days) duration rice varieties & land preparation for direct seeded upland rice, maize and pigeon pea. Continue planting of ginger and turmeric and undertake mulching with straw / leaves etc. to control weeds and to conserve soil moisture.
- In North Eastern plateau Zone, undertake field preparation for sowing of vegetables like long gourd ,round gourd, bitter gourd, sponge gourd and cucumber,continue planting of ginger& turmeric and cultivation of high yielding varieties of maize.
- In Western Plateau Zone, undertake raising of rice nursery under assured irrigation facility.
- In North Eastern plateau, due to high temperature the attack of fruit borer is severe in okra crop to control, spray of Endexocarb 0.5 ml per liter of water on a non-rainy day.
- In South Eastern Plateau Zone, present weather is congenial for infestation of fruit borer in summer okra, tomato and chilli, to control, spray Trizophos or Prophenphos @ 1ml per litre of water after current spells of rain..
- Suitable varieties for sowing are given in Annexure III.

• **Animal Husbandry**

- In Gangetic West Bengal, Bihar, Jharkhand and Odisha, keep cattle/goats indoor during thunderstorm / squall period. Give lots of clean water to the animals and keep them in the shaded place during noon hours

CENTRAL INDIA [M.P., CHHATTISGARH]



Sugarcane

Land preparation/Sowing

Okra

Onion

- **Realised Rainfall:** Rainfall occurred in Dantewada, Kowaradha and Narayanpur districts of Chhattisgarh. Weather remained mainly dry over rest of the region.

• **Advisories:**

▪ **Madhya Pradesh:**

- As rain/thundershowers would occur at many places over West Madhya Pradesh on 12th & 13th and over East Madhya Pradesh on 15th and 16th June, continue sowing of maize and redgram and land preparation for sowing of soybean and groundnut in Satpura Plateau Zone. Also undertake sowing of black gram, green gram and nursery preparation for rice and *kharif* vegetables utilizing the expected rainfall.
- Continue land preparation for sowing of *kharif* soybean and cotton. Continue nursery preparation for sowing of *kharif* vegetables in Malwa Plateau Zone utilizing the expected rainfall.
- Undertake land preparation for nursery sowing of rice in Kymore Plateau and Satpura Hill Zone.

▪ **Chhattisgarh:**

- Continue nursery sowing of rice with irrigation in Plain Zone of Chhattisgarh and undertake land preparation for sowing of tuber crops and nursery preparation for vegetables utilizing the realized and expected rainfall.
- Continue land preparation for sowing of *kharif* crops and for nursery sowing of rice in North Hill Zone utilizing the realized and expected rainfall.
- Complete planting of tuber crops by 15th June in Bastar Plateau Zone.
- In the prevailing weather, there are chances of attack of sucking pests in vegetables in Bastar Plateau Zone, spray Dimethoate 40 EC @ 1.5ml/litre of water on a non rainy day.
- Suitable varieties are given in Annexure III.

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



Cotton

Sugarcane

Chilli

Cabbage

- **Realised Rainfall:** Rainfall occurred in Anantnag, Baramulla, Ganderbal, Kupwara and Ramban districts of Jammu & Kashmir; Mohali district of Punjab. Weather remained mainly dry over rest of the region.
- **Advisories:**
 - Thunderstorm accompanied with squall would occur at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Rajasthan, and Uttar Pradesh on 12th June, provide mechanical support to vegetables and young fruit plants to prevent the crops from lodging due to strong winds. Also undertake propping in sugarcane.
 - **Jammu & Kashmir:**
 - In Sub Tropical Zone, Valley Temperate Zone and Intermediate Zone, undertake field preparation for transplanting of rice and also apply the recommended quantity of well rotten FYM/compost @ 15 tonnes /ha. In Intermediate Zone, continue sowing of maize, pulses and mash.
 - In Intermediate Zone of Jammu & Kashmir, continue sowing of bhindi and pole type beans.
 - In Intermediate Zone of Jammu & Kashmir, due to cloudy condition, there may be attack of red pumpkin beetle in vegetables. To control, apply Imidachloprid @0.3 ml/ litre of water or Quinolphos @ 1ml/litre of water on a non rainy day.
 - **Uttarakhand:**
 - Continue nursery sowing of rice, sowing of maize and finger millets in Bhabar and Tarai Zone of Uttarakhand utilising the pre-monsoon showers.
 - In Hill Zone of Uttarakhand, continue nursery sowing of rice, undertake sowing of pulses, soybean and transplanting of vegetables like tomato, capsicum and brinjal.
 - In Sub-humid Sub-tropic Zone, undertake land preparation for nursery sowing of rice and sowing of cotton and bajra.
 - In Hill Zone, due to increase in temperature, there may be attack of stem and fruit borer in brinjal & tomato, to control spray Imidacloprid @ 1ml / 2 litres of water on a non rainy day.
 - **Himachal Pradesh:**
 - Complete sowing of maize and nursery sowing of tall/dwarf basmati varieties of rice in Sub-Montane and Low Hills Sub-Humid Tropical Zone. Undertake planting of ginger, turmeric ,colocasia and elephant foot (Zimmikand) in low and mid hill regions of Sub-Montane and Low Hills Sub-Humid Tropical Zone.
 - In mid hill areas of Sub-Montane and Low Hills Sub-Humid Tropical Zone, continue transplanting of tomato, brinjal, capsicum, chilli and sowing of cucurbits like cucumber, bitter gourd, bottle gourd and summer squash. Also continue sowing of radish on flat beds. Undertake top dressing of second dose of nitrogen @ 40-50 kg Urea per ha in tomato, brinjal, capsicum and chilli.
 - Due to partly cloudy condition, there are chances of attack of white flies in vegetables like brinjal, capsicum and tomato in Mid Hills and Sub-Humid Zone. For control, apply Imidacloprid @ 7.5ml or Metasystox @ 15ml in 15 litres of water on a non rainy day.
 - **Rajasthan:**
 - Continue nursery preparation for *kharif* onion in Transitional Plain Zone of Inland drainage and Semi Arid Eastern Plain Zone and land preparation for sowing guar in Irrigated Northwestern Plain Zone.
 - In South Eastern Humid Plain Zone, apply irrigation in sugarcane at intervals of 8-10 days and continue nursery preparation for rice.
 - In Arid Western Plain Zone, undertake land preparation for sowing of groundnut and pearl millet.
 - In Semi Arid Eastern Plain Zone, continue field preparation for sowing of kharif crops like groundnut, pearl millet, sorghum, maize and cluster bean and undertake nursery of tomato.
 - Continue land preparation for sowing of hybrid cotton and Bt cotton, and undertake land preparation for sowing of maize and other kharif crops and nursery for papaya in Sub Humid Southern Plain and Aravali Hill Zone.
 - In Flood Prone Eastern Plain Zone, due to rise in temperature, there is chance of attack of mealy bug in okra and pod borer in moong. Spray Acephate 70 SP @ 1.0g per litre of water for mealy bug and also spray Quinolphos 25EC @ 1.25 litre dissolved in 600 -800 litre of water/ha to manage pod borer on a non rainy day.
 - **Punjab, Haryana and Delhi:**
 - In Western Zone of Haryana, undertake sowing of pigeon pea.
 - Continue nursery preparation for sowing of long duration rice and early cauliflower in Western Semi-Arid Zone of Delhi. Continue sowing of ladies finger, pigeon-pea and cotton and nursery sowing of vegetables like chilli, tomato

and brinjal. In view of less than normal rainfall forecast, farmers are advised to cultivate less area under rice. In those areas where irrigation facilities are limited farmers should cultivate crops such as arhar, pearl millet, guar, pulses etc. which require less water.

- Continue nursery preparation for sowing of rice in Undulating Plain Zone and complete nursery sowing of rice in Central Plain Zones of Punjab. Undertake nursery sowing of rice in Western Zone of Punjab.
- In Western Semi arid Zone of Haryana, continue transplanting of tomato and chilli, continue sowing of desi cotton and pigeon pea.
- Under hot weather condition, there is chance of attack of spider mite in brinjal in Western Zone of Punjab. Spray Omite 57EC @ 300ml or Kelthane 18.5EC @ 300ml or Fosmite 50EC @ 450 ml in 150 litres of water on a non rainy day.
- Due to prevailing hot weather condition, there is chance of attack of black bug in sugarcane in Central Plain Zone of Punjab, spray of Dursban/Lethal/Massban 20 EC @ 350 ml in 400 litres of water per acre on a non rainy day.
- **Uttar Pradesh:**
 - In Central Plain Zone, undertake sowing of arhar, groundnut, soybean, cucurbits and bitter gourd and continue land preparation for sowing of maize and nursery of rice. Continue planting of banana, transplanting of brinjal, chilli and cauliflower. Under prevailing high temperature condition, apply light and frequent irrigation in urad, moong (grain formation stage), maize (silking / grain formation stage), cucurbitaceous crops, bitter gourd, radish, water melon and in mango, citrus, papaya, ber and litchi orchards.
 - In Western Plain Zone, continue sowing of moong, urad and continue land preparation for nursery sowing of rice and sowing of Jowar, Lobia for fodder.
 - In Eastern Plain Zone, complete sowing of long duration varieties of rice and continue sowing of medium duration varieties of rice. Continue planting of sugarcane and kharif onion. In irrigated areas, continue sowing of arhar and maize. Undertake planting of banana.
 - In North Eastern Plain Zone, there are chances of incidence of root rot and attack of sucking pests in watermelon due to prevailing temperature condition. For control, drenching with Carbendazim 50 wp @ 1 kg per ha for root rot and spraying of Monocrotophos @ 0.2 % on a non rainy day for sucking pests is advised.
 - Suitable varieties for sowing are given in Annexure III.
- **Horticulture**
 - Continue transplanting of summer annuals like gladiolus, glardia, gomphrina, rudevekia, celosia, balsam and zinnia in Sub-Montane and Low Hills Sub Humid Zone of Himachal Pradesh.
 - In Sub-Montane and Low Hills Sub Humid Zone of Himachal Pradesh, attack of fruit borer is observed in litchi fruit. For control, spray Cypermethrin 10 EC @ 750 ml/ 750 litres of water per ha.
- **Apiculture**
 - In Sub-Montane and Low Hills Sub Humid Zone of Himachal Pradesh, keep the bee colonies in shady places and sprinkle water if possible to reduce the heat.
- **Animal Husbandry**
 - Undertake vaccination against Foot and mouth disease in cattles in Sub-Montane and Low Hills Sub Humid Zone of Himachal Pradesh. Spray Butox @ 2-3ml/litre of water to protect the animals against ecto-parasites.

Districtwise realised rainfall and % departure for past three weeks is given below in Annexure I

Annexure I
Week by week Rainfall Distribution

Sub-Divisions	27.05.15		03.06.15		10.06.15	
	Actual (mm)	% dep.	Actual (mm)	% dep.	Actual (mm)	% dep.
Arunachal Pradesh						
Anjaw	**	**	**	**	**	**
Changlang	35.8	-27	72.5	-18	91.1	-28
Dibang Valley	**	**	**	**	**	**
East Kameng	27.4	-29	20.1	-56	50.5	-28
East Siang	222.8	250	169.9	72	594.6	305
Kurung Kumey	**	**	**	**	**	**
Lohit	51.5	-12	140.5	64	223.7	168
Lower Dibang Valley	184.4	566	166.0	44	606.9	701
Lower Subansari	**	**	**	**	**	**
Papumpara	186.1	140	167.0	-2	465.8	248
Tawang	34.0	-54	73.0	-36	35.0	-75

Tirap	41.2	-40	68.4	-41	132.8	17
Upper Siang	153.1	60	99.6	-28	176.8	-16
Upper Subansari	41.0	-12	46.6	24	4.0	-92
West Kameng	163.6	119	52.6	-54	376.2	167
West Siang	107.0	167	50.0	-37	145.0	88
Assam&Meghalaya						
Assam						
Baksa	146.5	82	233.7	50	356.2	141
Barpeta	110.0	36	349.0	120	448.6	203
Bongaigaon	118.2	18	315.6	130	298.0	98
Cachar	77.1	6	95.7	-20	48.2	-64
Chirang	521.8	420	425.4	210	662.0	339
Darrang	**	**	**	**	**	**
Dhemaji	84.0	7	182.0	90	230.0	97
Dhubri	209.2	130	226.4	70	399.6	198
Dibrugarh	112.0	73	114.6	60	157.3	90
Goalpara	127.7	65	341.5	170	439.5	253
Golghat	58.2	34	72.3	30	30.2	-46
Hailakandi	55.7	-41	76.1	-40	48.8	-63
Jorhat	48.2	-19	109.1	80	47.5	-27
Kamrup(Rural)	102.9	88	248.4	180	105.0	38
Kamrup(Metro)	71.1	30	94.7	10	62.7	-18
Karbi Anglong	23.8	-33	32.8	-10	8.8	-81
Karimganj	99.4	-10	216.6	40	118.6	-16
Kokrajhar	123.8	8	326.7	80	518.8	214
Lakhimpur	110.4	41	209.8	120	264.5	127
Morigaon	80.6	128	52.6	10	23.8	-55
N.C.Hills	99.8	104	99.1	10	88.0	-9
Nowgong	32.5	12	39.3	-30	17.3	-73
Nalbari	151.3	118	260.5	160	328.4	186
Sonitpur	129.2	110	94.1	20	269.9	211
Sibsagar	86.0	84	87.5	40	81.5	64
Tinsukia	89.8	53	129.9	90	159.8	97
Udalgiri	90.5	67	97.5	10	234.6	178
Meghalaya						
East Garo Hills	243.6	326	242.6	172	255.7	86
East Khasi Hills	194.6	33	597.3	167	1074.2	233
Jaintia Hills	62.0	-61	125.0	-34	152.0	-32
Ribhoi	52.9	26	30.8	-60	13.5	-73
South Garo Hills	**	**	51.0	-46	44.0	-64
West Garo Hills	148.8	104	247.8	161	143.2	17
West Khasi Hills	105.0	28	180.0	90	99.0	8
NMMT						
Mizoram						
Aizwal	48.8	-42	63.8	-37	6.3	-94
Champhai	**	**	**	**	**	**
Kolasib	102.0	56	36.0	-60	7.0	-93
Lawngtlai	**	**	**	**	**	**
Lunglei	**	**	**	**	**	**
Mamit	**	**	**	**	**	**
Saiha	66.0	-30	1.0	-98	25.0	-70

Serchhip	**	**	0.0	-100	4.3	-95
Manipur						
Bishnupur	**	**	**	**	**	**
Chandel	**	**	**	**	**	**
Churachandpur	**	**	**	**	**	**
Imphal east	19.4	-50	13.8	-79	25.5	-69
Imphal west	21.4	106	17.9	-58	12.5	-84
Senapati	**	**	**	**	**	**
Tamenglong	**	**	**	**	**	**
Thoubal	54.0	120	2.0	-96	1.0	-99
Ukhrul	**	**	**	**	**	**
Nagaland						
Dimapur	19.1	3	5.3	-89	12.6	-81
Kephire	**	**	**	**	**	**
Kohima	19.2	-43	13.4	-70	12.3	-84
Longleng	**	**	**	**	**	**
Mokokchung	**	**	**	**	**	**
Mon	**	**	**	**	**	**
Paren	**	**	**	**	**	**
Phek	**	**	**	**	**	**
Tuensang	**	**	**	**	**	**
Wokha	**	**	**	**	**	**
Zunheboto	**	**	**	**	**	**
Tripura						
Dhalai	53.2	-35	59.1	-53	12.6	-89
North Tripura	106.1	11	147.9	15	50.3	-59
South Tripura	65.6	3	63.5	-35	3.3	-97
West Tripura	60.2	-14	119.9	17	4.8	-95
Himachal Pradesh						
Bilaspur	0.9	-93	1.5	-84	6.0	-55
Chamba	3.8	-63	9.8	71	13.7	-6
Hamirpur	0.5	-96	6.7	-37	11.0	-39
Kangra	2.9	-67	4.0	-61	7.5	-53
Kinnaur	14.4	12	2.3	-72	5.1	-40
Kullu	12.1	-28	6.4	-32	29.3	97
Lahaul and Spiti	21.0	29	4.0	-67	14.0	16
Mandi	4.1	-72	5.0	-72	17.0	-25
Shimla	3.6	-74	9.8	-27	9.2	-51
Sirmaur	0.4	-96	1.2	-85	0.1	-99
Solan	0.0	-100	4.6	-56	9.8	-47
Una	1.8	-63	3.7	-37	9.4	-14
Punjab						
Amritsar	0.0	-100	4.0	75	3.6	-3
Barnala	0.0	-100	5.4	86	0.6	-84
Bhatinda	0.0	-100	0.0	-100	0.7	-82
Faridkot	0.0	-100	12.1	653	12.8	205
Fatehgarh Saheb	0.0	-100	45.5	1200	16.3	269
Ferozpur	0.0	-100	1.6	0	0.9	-79
Gurdaspur	0.0	-100	0.3	-93	1.5	-78
Hoshiarpur	0.0	-100	0.1	-97	1.3	-84
Jalandhar	0.4	-89	0.0	-100	0.6	-82

Kapurthala	0.0	-100	4.5	88	4.5	7
Ludhiana	1.3	-67	2.5	-3	1.6	-75
Mansa	0.0	-100	0.0	-100	0.8	-74
Moga	0.0	-100	12.4	786	0.0	-100
Muktesar	0.0	-100	5.0	92	17.0	179
Nawashahar	0.0	-100	2.3	-22	4.0	-52
Patiala	0.0	-100	0.7	-83	9.1	33
Ropar	0.0	-100	1.9	-41	9.0	3
Sangrur	0.0	-100	3.0	-32	2.3	-63
Mohali	0.0	-100	13.0	217	56.0	882
TarnTaran	0.0	-100	0.3	-52	0.0	-100
Haryana,Chd,Delhi						
Haryana						
Ambala	0.4	-90	1.0	-79	4.9	-70
Bhiwani	0.0	-100	1.7	-43	0.5	-93
Chandigarh	1.1	-88	8.3	-11	24.6	77
Faridabad	0.0	-100	0.8	-77	0.0	-100
Fatehabad	0.0	-100	0.6	-87	1.2	-72
Gurgaon	0.0	-100	3.0	-6	0.0	-100
Hissar	0.0	-100	0.3	-92	0.4	-93
Jhajar	0.0	-100	5.1	77	3.3	8
Jind	0.0	-100	1.1	-73	0.3	-95
Katihall	0.0	-100	1.3	-52	2.6	-66
Karnal	0.0	-100	0.1	-96	0.0	-100
Kurukshetra	0.0	-100	2.5	-39	2.0	-73
Mahendragarh	0.0	-100	3.5	-35	1.2	-85
Mewat	0.0	-100	0.0	-100	0.0	-100
Palwal	0.0	-100	0.0	-100	1.0	-41
Panchkkula	0.3	-95	0.7	-88	14.3	-1
Panipat	0.0	-100	0.6	-81	0.0	-100
Rewari	0.0	-100	4.0	8	7.2	140
Rohtak	0.0	-100	1.5	-72	0.0	-100
Sirsa	0.0	-100	1.5	-44	0.0	-100
Sonepat	0.0	-100	3.8	21	0.0	-100
Yamunanagar	0.0	-100	1.1	-70	0.7	-97
Delhi						
Central Delhi	0.0	-100	6.0	71	0.0	-100
East Delhi	0.0	-100	3.0	-14	0.0	-100
New Delhi	0.0	-100	3.1	-11	0.0	-100
North Delhi	0.0	-100	11.1	216	1.8	-62
North East Delhi	**	**	3.0	-14	0.0	-100
North West Delhi	0.0	-100	6.8	95	3.3	-28
South Delhi	0.0	-100	12.2	249	1.3	-72
South West Delhi	0.0	-100	11.1	217	2.9	-38
West Delhi	0.0	-100	7.0	100	4.0	-13
Jammu & Kashmir						
Anantnag	29.6	17	8.9	-34	41.5	151
Badgam	16.5	-13	3.9	-51	17.2	115
Bandipore	**	**	**	**	**	**
Baramula	21.6	-19	14.3	-20	33.4	94
Doda	10.0	-55	22.4	56	24.8	132

Ganderbal	34.4	118	7.8	-10	33.0	263
Jammu	0.1	-99	2.9	-38	1.1	-84
Kargil	**	**	**	**	**	**
Kathua	0.0	-100	6.4	144	2.7	-50
Kistwar	**	**	**	**	**	**
Kulgam	18.6	-26	1.1	-88	28.3	71
Kupwara	23.5	-5	2.9	-86	39.6	241
Ladakh(Leh)	0.0	-100	1.0	100	3.7	367
Poonch	**	**	**	**	**	**
Pulwama	22.8	24	5.4	46	24.4	166
Rajouri	0.0	-100	3.2	-60	4.5	-35
Ramban	11.7	-47	16.0	75	35.7	234
Reasi	2.6	-69	11.4	171	9.4	-33
Samba	0.1	-99	6.8	48	0.4	-95
Shopian	**	**	**	**	**	**
Srinagar	17.6	12	3.2	-63	24.5	169
Udhampur	0.0	-100	11.5	42	7.3	-48
East Madhya Pradesh						
Anuppur	0.0	-100	5.1	-44	0.0	-100
Balaghat	0.0	-100	0.0	-100	1.6	-90
Chhatarpur	0.1	-92	9.6	167	0.8	-91
Chindwara	0.0	-100	4.5	-44	6.5	-61
Damoh	0.0	-100	0.0	-100	0.0	-100
Dindori	1.0	-74	8.2	86	0.0	-100
Jabalpur	1.5	15	0.3	-95	0.2	-99
Katni	0.0	-100	0.0	-100	0.0	-100
Mandla	1.9	-3	0.0	-100	6.3	-52
Narsingpur	0.0	-100	0.0	-100	0.0	-100
Panna	0.0	-100	0.0	-100	0.0	-100
Rewa	0.0	-100	0.0	-100	0.0	-100
Sagar	2.0	5	2.9	-56	0.0	-100
Satna	0.0	-100	0.4	-84	0.0	-100
Seoni	2.0	18	8.7	70	14.2	18
Shahdol	0.0	-100	0.0	-100	0.0	-100
Sidhi	0.0	-100	0.0	-100	0.0	-100
Singrauli	0.0	-100	1.8	500	0.0	-100
Tikamgarh	0.0	-100	12.0	208	0.0	-100
Umaria	0.0	-100	0.0	-100	0.0	-100
West Madhya Pradesh						
Agar	0.0	-100	**	**	0.0	-100
Alirajpur	0.0	-100	0.0	-100	0.0	-100
Asoknagar	0.0	-100	0.0	-100	0.0	-100
Badwani	0.0	-100	0.0	-100	0.0	-100
Betul	0.0	-100	0.0	-100	0.0	-100
Bhind	0.0	-100	0.0	-100	2.5	-53
Bhopal	0.0	-100	8.4	-3	0.0	-100
Burhanpur	0.0	-100	0.0	-100	0.0	-100
Datia	0.0	-100	0.0	-100	6.0	67
Dewas	0.0	-100	0.0	-100	0.0	-100
Dhar	0.0	-100	0.0	-100	0.0	-100
Guna	0.0	-100	0.0	-100	0.0	-100

Gwalior	0.0	-100	0.0	-100	2.2	-51
Harda	0.0	-100	0.0	-100	0.0	-100
Hosangabad	0.0	-100	1.7	-80	18.9	48
Indore	0.0	-100	0.0	-100	0.0	-100
Jhabua	0.0	-100	0.0	-100	0.0	-100
Khandwa	0.0	-100	0.0	-100	0.0	-100
Khargone	0.0	-100	0.2	-97	0.5	-97
Mandsaur	0.0	-100	0.0	-100	0.0	-100
Morena	0.0	-100	0.0	-100	0.0	-100
Neemuch	0.0	-100	0.0	-100	0.0	-100
Raisen	0.0	-100	2.4	-53	0.0	-100
Rajgarh	0.0	-100	0.8	-83	11.0	-6
Ratlam	0.0	-100	0.0	-100	0.0	-100
Sehore	0.0	-100	0.0	-100	0.0	-100
Shajapur	0.0	-100	6.0	0	0.0	-100
Sheopur Kalani	0.0	-100	0.0	-100	0.0	-100
Shivpuri	0.0	-100	0.0	-100	0.0	-100
Ujjain	0.0	-100	0.0	-100	0.0	-100
Vidisha	0.0	-100	0.9	-79	0.0	-100
Chhattisgarh						
Bastar	0.2	-97	0.1	-99	20.2	-22
Bijapur	0.0	-100	0.0	-100	20.1	43
Bilaspur	0.0	-100	2.7	-61	16.9	3
Dantewara	0.0	-100	2.0	-77	41.8	166
Dhamtari	9.0	233	10.0	56	9.2	-23
Durg	1.0	-41	9.3	47	7.9	-55
Janjgir	0.0	-100	34.4	549	8.2	-37
Jashpurnagar	0.0	-100	0.0	-100	2.2	-94
Kanker	0.0	-100	0.0	-100	13.6	1
Korba	0.0	-100	61.1	1148	16.9	26
Koriya	0.0	-100	0.0	-100	2.5	-86
Kawardha	0.0	-100	0.0	-100	32.6	186
Mahasumund	0.0	-100	2.1	-78	12.5	-32
Narayanpur	0.0	-100	0.0	-100	65.4	196
Raigarh	0.0	-100	0.0	-100	0.7	-97
Raipur	0.0	-100	6.0	-6	24.3	31
Rajandgaon	0.0	-100	4.4	-22	19.0	31
Surguja	0.0	-100	0.0	-100	0.0	-100
East Uttar Pradesh						
Allahabad	0.0	-100	0.1	-97	0.0	-100
Ambedkar Nagar	0.0	-100	0.0	-100	0.0	-100
Azamgarh	0.0	-100	0.0	-100	0.0	-100
Bahraich	0.0	-100	0.0	-100	0.0	-100
Ballia	0.0	-100	0.0	-100	0.0	-100
Balrampur	0.0	-100	0.0	-100	0.0	-100
Banda	0.0	-100	0.0	-100	0.0	-100
Barabanki	0.0	-100	0.0	-100	0.0	-100
Basti	0.8	-84	0.0	-100	0.0	-100
Chandauli	0.0	-100	0.0	-100	0.0	-100
Deoria	0.0	-100	0.0	-100	0.0	-100
Faizabad	0.0	-100	0.0	-100	0.0	-100

Farrukhabad	0.0	-100	0.0	-100	0.4	-93
Fatehpur	0.0	-100	0.0	-100	0.0	-100
Gazipur	0.0	-100	0.0	-100	2.5	-80
Gonda	0.9	-87	0.0	-100	0.0	-100
Gorakhpur	0.0	-100	0.0	-100	1.7	-94
Hardoi	0.0	-100	0.0	-100	0.6	-94
Jaunpur	0.0	-100	0.0	-100	0.0	-100
Kannauj	0.0	-100	0.0	-100	2.8	-38
Kanpur City	0.0	-100	0.2	-94	0.9	-83
Kanpur Dehat	0.0	-100	0.0	-100	0.0	-100
Kaushambi	0.0	-100	0.0	-100	0.0	-100
Kheri	0.0	-100	0.7	-92	0.0	-100
Kushi nagar	0.0	-100	0.0	-100	0.0	-100
Lucknow	0.0	-100	0.0	-100	0.0	-100
Maharajganj	0.0	-100	0.0	-100	0.0	-100
Mau	0.0	-100	0.0	-100	0.0	-100
Mirzapur	0.0	-100	0.0	-100	0.0	-100
Pratapgarh	0.0	-100	0.0	-100	0.0	-100
RaiBareilly	0.0	-100	0.0	-100	0.0	-100
Sahuji Maharajnagar	0.0	-100	4.0	38	0.0	-100
Sant Kabirnnagar	1.8	-68	0.0	-100	0.0	-100
Sant Ravidas Nagar	0.0	-100	0.0	-100	0.0	-100
Shrawasti	**	**	0.0	-100	28.1	38
Sidharthnagar	0.0	-100	0.0	-100	5.9	-74
Sitapur	0.0	-100	0.8	-56	0.3	-98
Sonbhadra	0.0	-100	0.0	-100	0.7	-96
Sultanpur	0.0	-100	0.0	-100	0.0	-100
Unnao	0.0	-100	0.0	-100	0.5	-95
Varanasi	0.0	-100	0.0	-100	0.0	-100
West Uttar Pradesh						
Agra	0.3	-86	0.0	-100	1.8	-66
Aligarh	1.1	-61	0.0	-100	0.4	-92
Auraiya	0.0	-100	0.0	-100	0.0	-100
Badaun	0.0	-100	0.0	-100	0.0	-100
Baghpat	0.0	-100	6.5	141	9.3	166
Bareilly	0.7	-82	0.0	-100	0.2	-99
Bijnor	0.0	-100	0.3	-97	0.0	-100
Bulandsahar	0.0	-100	0.1	-99	0.4	-94
Etah	0.0	-100	0.3	-94	2.4	-35
Etawah	0.0	-100	0.0	-100	11.5	53
Firozabad	0.0	-100	0.0	-100	3.0	-30
GBNagar	0.0	-100	0.0	-100	0.0	-100
Ghaziabad	0.0	-100	1.0	-62	0.0	-100
Hamirpur	0.0	-100	0.0	-100	0.0	-100
Jalaun	0.8	-56	0.0	-100	0.5	-89
Jhansi	0.3	-86	1.7	-60	0.5	-93
Jotiba Phule Nagar	0.0	-100	0.0	-100	0.0	-100
Kanshiramnagar	0.0	-100	0.0	-100	6.0	82
Lalitpur	0.0	-100	8.0	48	1.5	85
Mahamaya Nagar	0.0	-100	2.5	-17	1.5	-60
Mahoba	0.0	-100	0.0	-100	0.0	-100

Mainpuri	0.0	-100	0.0	-100	1.7	-56
Mathura	0.0	-100	0.0	-100	0.0	-100
Meerut	0.5	-77	1.2	-76	0.2	-98
Moradabad	0.0	-100	0.0	-100	0.0	-100
Muzzaffarnagar	0.0	-100	2.2	-37	0.7	-92
Pilibhit	0.0	-100	0.0	-100	0.0	-100
Rampur	0.0	-100	0.0	-100	0.0	-100
Saharanpur	0.0	-100	0.0	-100	0.0	-100
Shahjahanpur	0.0	-100	0.0	-100	0.3	-97
Uttarakhand						
Almora	0.0	-100	0.5	-97	0.0	-100
Bageshwar	0.3	-98	3.8	-80	0.0	-100
Chamoli	5.4	-63	1.3	-90	2.0	-87
Champawat	0.0	-100	2.5	-83	0.0	-100
Dehradun	0.0	-100	3.0	-83	0.0	-100
Garhwal Pauri	0.0	-100	0.0	-100	0.0	-100
Garhwal Tehri	0.7	-95	1.3	-93	0.0	-99
Haridwar	0.0	-100	0.0	-100	0.0	-100
Nainital	0.0	-100	1.4	-94	0.0	-100
Pithorgarh	6.1	-74	1.8	-93	0.0	-100
Rudraprayag	2.6	-87	0.6	-97	1.7	-94
Udham Sing Nagar	0.0	-100	0.0	-100	0.0	-100
Uttarkashi	2.9	-89	5.0	-79	3.8	-86
Bihar						
Araria	72.2	133	37.3	2	0.0	-100
Arwal	0.0	-100	0.0	-100	6.9	-55
Aurangabad	0.0	-100	3.7	-35	9.7	-28
Banka	0.0	-100	0.8	-95	0.0	-100
Begusarai	0.0	-100	0.0	-100	0.0	-100
Bhabua	0.0	-100	0.0	-100	5.9	-54
Bhagalpur	7.2	-55	5.8	-70	0.0	-100
Bhojpur	0.0	-100	0.0	-100	0.0	-100
Buxar	**	**	0.0	-100	0.0	-100
Darbhanga	6.7	-58	0.0	-100	0.0	-100
East Champaran	6.6	-55	0.0	-100	0.0	-100
Gaya	0.0	-100	0.2	-97	6.2	-52
Gopalganj	0.0	-100	0.0	-100	0.0	-100
Jahanabad	0.0	-100	2.9	-42	1.2	-92
Jamui	0.0	-100	0.0	-100	0.0	-100
Katihar	16.0	-26	41.2	36	0.0	-100
Khagadia	3.5	-73	0.0	-100	0.6	-98
Kishanganj	78.6	73	49.7	-8	46.6	-5
Lakhisarai	0.0	-100	0.0	-100	0.0	-100
Madhepura	20.0	-3	2.0	-92	0.0	-100
Madhubani	12.6	-43	0.0	-100	0.0	-100
Monghyar	0.0	-100	0.2	-98	18.4	-41
Muzaffarpur	2.5	-83	0.0	-100	0.0	-100
Nalanda	0.0	-100	0.0	-100	8.0	-41
Nawada	0.0	-100	0.0	-100	0.0	-100
Patna	0.0	-100	27.3	314	0.0	-100
Purnea	23.7	-20	37.8	-2	0.0	-100

Rohtas	0.0	-100	0.0	-100	0.0	-100
Saharsha	25.0	-12	0.0	-100	0.0	-100
Samstipur	6.1	-63	0.0	-100	0.0	-100
Saran	0.0	-100	0.0	-100	0.0	-100
Sheikpura	0.0	-100	0.0	-100	0.0	-100
Sheohar	0.0	-100	0.0	-100	0.0	-100
Sitamarhi	10.0	-49	0.0	-100	7.2	-81
Siwan	0.0	-100	0.0	-100	0.0	-100
Supaul	35.0	101	8.6	-62	0.0	-100
Vaishali	0.0	-100	0.0	-100	0.0	-100
West Champaran	1.7	-89	0.0	-100	0.0	-100
Jharkhand						
Bokaro	0.0	-100	0.7	-95	19.8	-38
Chatra	0.0	-100	1.0	-87	7.4	-54
Deoghar	1.9	-87	1.9	-83	0.0	-100
Dhanbad	3.8	-61	3.4	-77	6.5	-81
Dumka	0.0	-100	9.3	-47	2.0	-94
East Singbhum	2.7	-82	20.4	6	21.1	-40
Garhwa	0.0	-100	0.0	-100	**	**
Giridih	0.0	-100	0.0	-100	8.8	-68
Godda	0.0	-100	4.7	-67	0.0	-100
Gumla	0.0	-100	0.2	-99	35.9	16
Hazaribagh	0.0	-100	0.0	-100	14.9	-40
Jamtara	0.0	-100	15.6	-31	0.0	-100
Khunti	2.0	-85	0.0	-100	2.5	-91
Koderna	0.0	-100	0.0	-100	11.1	-51
Latehar	0.0	-100	4.0	-54	14.5	-24
Lohardagga	0.0	-100	0.0	-100	33.9	73
Pakur	0.0	-100	20.9	-27	6.5	-85
Palamau	0.0	-100	0.7	-85	1.6	-91
Ramgarh	0.0	-100	0.0	-100	0.0	-100
Ranchi	0.4	-97	2.5	-84	7.4	-73
Sahebganj	31.4	21	13.4	-47	4.6	-88
Saraikela	7.1	-31	3.8	-73	12.5	-64
Simdega	**	**	4.4	-63	1.7	-93
West Singbhum	2.2	-82	34.4	108	5.1	-86
East Rajasthan						
Ajmer	0.0	-100	0.5	-90	4.0	20
Alwar	0.0	-100	1.4	-68	1.8	-67
Banswara	0.0	-100	0.3	-94	0.0	-100
Baran	0.0	-100	0.0	-100	0.0	-100
Bharatpur	0.0	-100	0.0	-100	0.5	-87
Bhilwara	0.0	-100	2.7	-52	2.2	-60
Bundi	0.0	-100	0.3	-92	4.8	-21
Chittorgarh	2.6	-15	5.9	-8	5.0	-18
Dausa	0.0	-100	0.0	-100	0.0	-100
Dholpur	0.0	-100	2.3	-10	0.7	-89
Dungarpur	0.0	-100	1.3	-69	0.6	-91
Jaipur	0.0	-99	0.0	-100	5.7	-9
Jhalawar	0.0	-100	0.4	-93	0.3	-96
Jhunjhunu	0.0	-100	7.2	30	5.9	-29

Karauli	0.0	-100	0.0	-100	0.0	-100
Kota	0.0	-100	0.0	-100	0.8	-89
Pratapgarh	0.0	-100	1.0	-83	0.0	-100
Rajsamand	0.4	-87	9.3	43	2.1	-70
Sawai Madhopur	0.4	-86	0.0	-100	0.0	-100
Sikar	1.7	-61	2.9	-51	6.3	-6
Sirohi	0.0	-100	17.6	176	0.0	-100
Tonk	0.2	-92	0.1	-97	3.0	-37
Udaipur	0.0	-100	11.0	115	5.1	-12
West Rajasthan						
Barmer	0.0	-100	8.4	64	6.0	199
Bikaner	1.7	-65	22.1	401	4.3	24
Churu	0.0	-100	10.8	163	1.0	-84
Hanumangarh	0.0	-100	3.9	38	3.6	-15
Jaisalmer	0.0	-100	13.5	609	3.7	148
Jalore	0.0	-100	10.1	135	0.0	-100
Jodhpur	0.0	-100	5.2	-5	0.5	-80
Nagaur	4.2	-13	5.7	14	2.2	-37
Pali	0.3	-86	8.8	21	0.9	-79
Sri Ganganagar	0.0	-100	4.0	61	8.8	152
Gujarat Region						
Ahmedabad	0.0	-100	0.2	-90	12.2	7
Anand	0.0	-100	0.0	-100	0.0	-100
Banaskantha	0.0	-100	0.9	-70	0.0	-100
Baroda	0.0	-100	0.0	-100	1.4	-92
Broach	0.0	-100	0.0	-100	0.5	-98
DNH	**	**	0.0	-100	59.4	-1
Dahod	0.0	-100	0.0	-100	0.0	-100
Daman	**	**	0.0	-100	41.2	-31
Dangs	0.0	-100	0.0	-100	60.5	108
Gandhinagar	0.0	-100	0.3	-88	4.0	-7
Kheda	0.0	-100	0.0	-100	0.9	-93
Mehsana	0.0	-100	3.4	70	0.0	-100
Narmada	0.0	-100	0.0	-100	2.1	-90
Navsari	0.0	-100	0.0	-100	22.9	-26
Panchmahal	0.0	-100	0.0	-100	0.0	-100
Patan	0.0	-100	0.0	-100	0.1	-95
Sabarkantha	0.0	-100	1.7	-73	0.0	-100
Surat	0.0	-100	0.0	-100	5.3	-79
Tapi	0.0	-100	0.0	-100	6.2	-78
Valsad	0.0	-100	0.0	-100	89.9	206
S K & Diu region						
Amreli	0.0	-100	**	**	7.1	-52
Bhavnagar	0.0	-100	0.0	-100	14.3	-25
Diu	0.0	-100	0.0	-100	2.4	-75
Jamnagar	0.0	-100	0.0	-100	20.4	115
Junagarh	0.0	-100	0.0	-100	7.7	-56
Kutch	0.0	-100	0.0	-100	14.6	218
Porbandar	0.0	-100	0.0	-100	5.2	-53
Rajkot	0.0	-100	0.0	-100	6.9	-37
Surendranagar	0.0	-100	0.2	-94	9.5	0

Maharashtra & Goa						
Konkan & Goa						
Mumbai City	0.0	-100	0.0	-100	14.2	-78
Mumbai Suburban	0.0	-100	0.0	-100	4.9	-92
North Goa	0.0	-100	**	**	80.8	-47
Raigad	0.0	-100	0.0	-100	15.1	-79
Ratnagiri	0.0	-100	1.9	-95	43.3	-59
Sindhudurg	0.0	-100	10.0	-81	86.4	-41
South Goa	1.3	-95	**	**	89.9	-38
Thane	0.0	-100	0.0	-100	10.2	-80
Madhya Maharashtra						
Ahmednagar	0.0	-100	7.9	-14	27.6	4
Dhule	**	**	0.0	-100	12.9	-34
Jalgaon	0.0	-100	0.0	-100	2.7	-86
Kolhapur	0.1	-99	25.6	17	43.8	-9
Nandurbar	**	**	0.0	-100	7.6	-67
Nasik	0.0	-100	0.0	-100	26.1	-8
Pune	0.0	-100	6.9	-33	43.8	33
Sangli	0.6	-97	35.7	111	45.8	49
Satara	0.0	-99	16.8	15	40.5	22
Solapur	0.0	-100	13.0	2	25.1	-11
Marathwada						
Aurangabad	0.0	-100	0.0	-100	23.5	-17
Beed	0.0	-100	1.0	-91	21.0	-29
Hingoli	0.0	-100	1.7	-81	14.4	-25
Jalna	0.0	-100	0.7	-93	22.0	-11
Latur	0.0	-100	1.8	-85	23.9	-3
Nanded	0.0	-100	2.9	-66	14.3	-35
Usmanabad	0.0	-100	3.1	-81	18.7	-40
Parbhani	0.0	-100	0.5	-95	13.4	-47
Vidarbha						
Akola	0.0	-100	0.0	-100	0.2	-99
Amraoti	0.0	-100	0.1	-98	6.2	-59
Bhandara	0.0	-100	4.7	-6	0.4	-97
Buldhana	0.0	-100	0.0	-100	17.5	0
Chandrapur	0.0	-100	31.4	423	6.2	-50
Gadchiroli	0.0	-100	1.3	-84	77.1	348
Gondia	0.0	-100	8.8	193	10.3	-31
Nagpur	0.1	-95	5.4	-22	14.0	-18
Wardha	0.9	-68	2.0	-79	1.9	-88
Washim	0.0	-100	0.0	-100	10.4	-48
Yeotmal	0.0	-100	7.2	-9	5.8	-69
Odisha						
Angul	0.2	-99	4.8	-76	30.9	-14
Balasore	1.5	-95	11.2	-68	2.2	-96
Bargarh	0.0	-100	9.8	0	15.0	-20
Bhadrak	0.8	-96	7.1	-72	1.4	-97
Bolangir	0.0	-100	22.8	79	11.9	-39
Boudh	0.0	-100	1.5	-93	23.0	-8
Cuttack	0.1	-99	8.8	-57	11.0	-73
Deogarh	0.0	-100	9.8	-32	6.1	-76






Dhenkanal	0.0	-100	2.6	-87	13.6	-66
Gajapati	5.9	-72	13.2	-33	30.8	-11
Ganjam	0.3	-98	0.9	-94	4.1	-85
Jagatsingpur	0.0	-99	0.0	-100	4.6	-89
Jajpur	8.9	-64	0.0	-100	0.0	-99
Jharsuguda	0.0	-100	25.4	94	16.4	-44
Kalahandi	0.5	-93	40.3	118	5.5	-76
Kandhamal	0.0	-100	10.5	-50	30.9	24
Kendrapara	0.0	-100	0.0	-100	1.7	-96
Keonjhar	1.7	-93	36.2	36	11.2	-75
Khurda	0.0	-99	5.1	-68	1.2	-95
Koraput	3.5	-79	24.2	22	31.1	10
Malkangiri	0.0	-100	0.0	-100	47.0	139
Mayurbhanj	9.7	-68	25.5	9	7.6	-87
Nawapara	0.0	-100	7.5	-30	79.1	354
Nawarangpur	0.3	-99	34.0	11	34.3	-5
Nayagarh	0.0	-100	0.0	-100	24.7	-4
Puri	0.0	-100	0.3	-99	12.9	-45
Rayagada	0.1	-99	13.2	-30	29.1	30
Sambalpur	0.0	-100	26.9	87	13.8	-46
Sonepur	0.0	-100	1.3	-88	4.5	-84
Sundargarh	0.0	-100	9.9	-37	16.9	-43
West Bengal & Andaman Nicobar Islands						
A & N ISLAND						
Nicobar	57.5	-45	21.5	-76	13.4	-79
North & Middle Andaman	237.2	129	64.5	-45	25.7	-82
South Andaman	145.9	41	73.9	-39	34.6	-72
GWB						
Bankura	4.1	-69	7.7	-70	6.9	-83
Birbhum	4.2	-74	25.1	5	17.8	-51
Burdwan	4.8	-78	4.3	-81	7.5	-79
East Midnapore	8.4	-63	2.1	-95	1.7	-97
Hooghly	1.1	-96	0.0	-100	8.3	-83
Howrah	0.0	-100	0.0	-100	27.0	-43
Kolkata	7.6	-75	0.0	-100	0.5	-99
Murshidabad	5.0	-81	35.0	31	17.1	-70
Nadia	1.0	-96	0.0	-100	9.7	-77
24 Pargana (N)	1.0	-97	0.0	-100	4.3	-92
Purulia	2.8	-80	2.1	-89	6.9	-84
24 Pargana (S)	1.8	-94	0.0	-100	5.5	-92
West Midnapore	16.5	-44	0.3	-99	3.1	-93
SHWB & Sikkim						
Cooch Behar	85.6	-19	126.4	5	243.3	99
Darjeeling	51.4	-21	66.8	-7	82.2	-14
East Sikkim	114.4	102	167.6	86	166.4	152
Jalpaiguri	74.0	-23	153.3	38	370.2	207
Malda	2.5	-90	23.5	-26	0.0	-100
North Dinajpur	30.5	46	17.5	-65	16.5	-73
North Sikkim	129.7	70	354.8	225	106.6	-2
South Dinajpur	19.7	-59	30.3	-36	0.0	-100

South Sikkim	100.5	78	37.8	-58	60.5	-8
West Sikkim	42.0	-45	65.0	-41	50.0	-54
Karnataka						
Coastal Karnataka						
Dakshina Kannada	0.6	-99	20.6	-77	142.4	-20
Udupi	0.6	-99	37.0	-61	122.8	-42
Uttara Kannada	0.4	-99	26.2	-49	64.2	-50
NI Karnataka						
Bagalkote	0.6	-97	37.5	81	21.4	1
Belagavi	0.7	-97	46.7	122	31.5	19
Bidar	0.0	-100	7.5	-46	12.6	-55
Dharwad	0.2	-99	55.8	158	43.1	57
Gadag	1.0	-95	50.3	144	17.2	-35
Haveri	0.0	-100	39.9	128	16.5	-39
Kalaburgi	0.4	-96	5.3	-57	13.1	-46
Koppal	3.6	-78	32.1	120	13.4	-35
Raichur	1.0	-93	18.9	67	5.3	-68
Vijayapura	0.7	-96	19.5	16	24.8	-6
Yadgir	0.0	-100	6.2	-57	30.2	38
SI Karnataka						
Ballari	0.0	-100	42.7	133	14.5	-27
Bangalore Rural	1.7	-92	79.7	227	29.4	24
Bangalore Urban	1.3	-95	40.7	42	12.3	-50
Chamarajanagar	0.4	-99	49.4	98	23.0	51
Chikaballapur	0.0	-100	56.1	215	17.0	-8
Chikkamagaluru	0.1	-99	42.4	41	32.7	-52
Chitradurga	0.0	-100	74.1	326	22.7	51
Davangere	0.0	-100	55.1	191	9.4	-53
Hassan	0.5	-98	59.9	197	15.4	-35
Kodagu	0.0	-100	51.9	26	58.2	-38
Kolar	3.6	-81	46.4	120	15.6	-16
Mandya	1.5	-95	59.0	207	17.6	14
Mysuru	5.2	-84	51.7	136	46.0	126
Ramanagara	1.5	-95	65.2	112	30.1	31
Shivamogga	0.2	-99	26.8	14	38.3	-38
Tumakuru	1.4	-93	63.1	173	20.2	10
Kerala						
Alappuzha	18.1	-77	20.0	-80	109.3	-36
Kannur	1.9	-97	12.9	-86	109.4	-37
Ernakulam	5.3	-94	71.2	-38	46.8	-72
Idukki	1.2	-98	6.7	-91	53.5	-63
Kasaragod	3.8	-95	21.7	-79	145.3	-33
Kollam	14.1	-76	13.5	-83	91.9	-31
Kottayam	0.7	-99	108.6	-5	80.4	-51
Kozhikode	10.9	-85	4.4	-96	62.5	-70
Malappuram	3.6	-94	16.5	-79	94.9	-32
Palakkad	0.7	-98	32.9	-28	34.2	-63
Pathanamthitta	0.4	-99	0.7	-99	80.9	-47
Thiruvananthapuram	32.3	-38	15.5	-78	68.6	-39

Thrissur	2.4	-97	19.3	-80	71.6	-57
Wynad	0.3	-99	19.5	-64	64.7	-51
Tamil Nadu						
Ariyalur	0.0	-100	32.3	115	16.6	36
Chennai	0.0	-100	2.6	-46	1.9	-83
Coimbatore	0.0	-100	15.8	37	10.0	47
Cuddalore	0.2	-98	37.6	276	22.0	90
Dharmapuri	0.0	-100	40.4	61	7.9	-54
Dindigul	0.0	-99	18.7	23	35.2	206
Erode	0.0	-100	62.9	34	20.0	130
Kanchipuram	0.1	-99	4.4	-57	5.8	-58
Kanyakumari	29.9	4	16.6	-60	29.9	-51
Karikal	0.0	-100	23.8	49	0.5	-96
Karur	0.0	-100	21.0	119	31.1	370
Krishnagiri	0.0	-100	75.0	223	8.9	-47
Madurai	0.0	-100	21.3	72	33.6	195
Nagapattinam	0.0	-100	6.7	0	5.3	-44
Namakkal	0.0	-100	24.1	33	16.6	47
Nilgiris	0.6	-98	52.6	116	21.8	-32
Perambalur	0.0	-100	31.0	187	1.0	-90
Puducherry	0.0	-100	25.2	334	0.0	-100
Pudukottai	0.0	-100	19.5	68	17.7	84
Ramanathapuram	0.0	-100	6.5	24	2.2	-22
Salem	0.0	-100	34.1	59	24.1	48
Sivaganga	0.0	-100	23.5	77	20.8	173
Thanjavur	0.0	-100	22.0	109	10.8	3
Theni	0.0	-100	4.9	-44	11.8	118
Tirunelveli	0.0	-100	8.7	30	2.5	-76
Tirupur	0.0	-100	38.1	250	18.3	220
Tiruvallur	0.0	-100	7.0	-30	19.6	58
Tiruvannamalai	5.3	-65	37.7	135	3.4	-78
Tiruvarur	0.0	-100	0.9	-86	6.3	-22
Toothukudi	0.0	-100	0.2	-96	14.3	579
Trichy	0.0	-100	43.0	252	14.3	51
Vellore	1.5	-93	63.4	214	13.7	-16
Villupuram	0.0	-100	23.8	165	2.5	-78
Virudhunagar	0.0	-100	1.1	-90	13.5	174
Andhra Pradesh						
Coastal Andhra Pradesh						
East Godavari	0.0	-100	6.5	-54	69.4	235
Guntur	1.8	-87	8.7	-25	31.9	68
Krishna	0.0	-100	16.0	29	24.7	39
Nellore	1.8	-87	19.0	163	12.5	9
Prakasam	1.5	-91	4.9	-51	22.7	50
Sirkakulam	0.6	-96	2.5	-79	25.8	11
Visakhapatnam	1.1	-94	21.2	19	74.4	210
Vizianagram	0.9	-95	23.3	15	89.4	245
West Godavari	0.4	-96	17.3	53	43.9	113
Rayalaseema						

Anantapur	0.0	-100	5.0	-55	20.8	20
Chittoor	0.7	-96	2.8	-71	20.6	18
Cuddapah	0.0	-100	2.0	-81	18.3	8
Kurnool	0.0	-100	20.4	95	20.6	12
Telangana						
Adilabad	0.0	-100	65.4	276	11.6	-46
Hyderabad	0.0	-100	60.2	310	55.0	218
Karimnagar	0.0	-100	39.9	173	21.7	-3
Khammam	0.0	-100	5.1	-64	26.0	33
Mehabubnagar	1.8	-83	0.0	-100	19.8	-1
Medak	0.0	-100	1.0	-1	12.3	-44
Nalgonda	0.5	-94	0.0	-100	30.2	52
Nizamabad	0.4	-94	22.9	170	10.4	-60
Rangareddy	0.1	-99	2.5	-78	22.8	21
Warangal	0.0	-100	5.5	-32	34.2	64

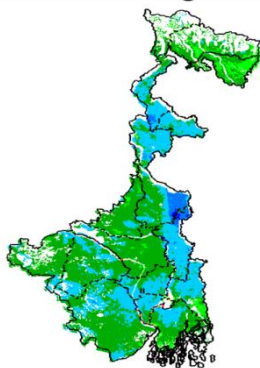
Legends

	(20% or more) excess rainfall		(-60 to -99 %) scanty rainfall
	(-19 to +19%) normal rainfall		(-100%) no rainfall
	(-20 to -59%) deficient rainfall	**	Data not available

Annexure II

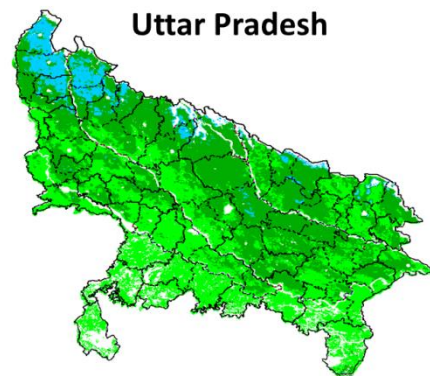
INSAT 3A CCD NDVI COMPOSITE MAPS FOR THE WEEK ENDING ON 10th JUNE 2015 FOR DIFFERENT STATES

West Bengal



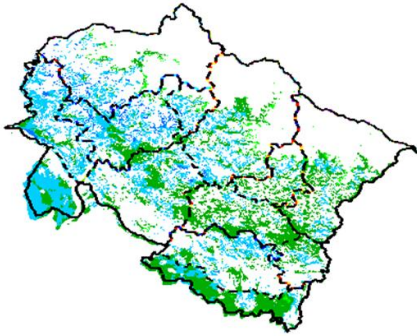
Agricultural vigour is very good over the parts of West Bengal, whereas eastern parts of West Bengal show dominantly higher values of NDVI varying from 0.4-0.6. NDVI values are normal over remaining part of state.

Uttar Pradesh



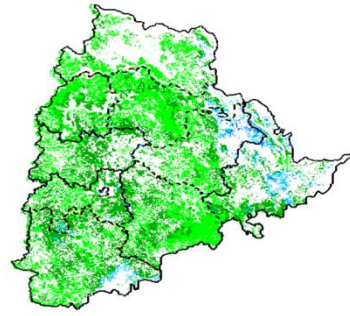
Agricultural vigour is normal over the entire state of Uttar Pradesh where NDVI value varies from 0.2 -0.4. Except for north western part were slightly higher values (0.4-0.5) of NDVI are observed.

Uttarakhand



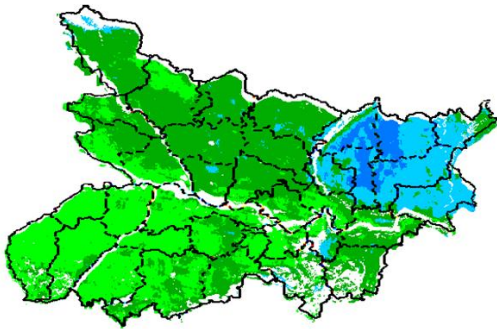
Agriculture vigour is very good over central parts of Uttarakhand with NDVI value varying between 0.4 - 0.6, whereas isolated patches with normal value of NDVI are observed over remaining parts of the state.

Telangana



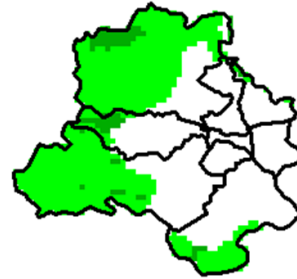
NDVI values vary from 0.2 - 0.4 over Telangana. Higher (> 0.4) values are seen in some patches over eastern parts of Telangana.

Bihar



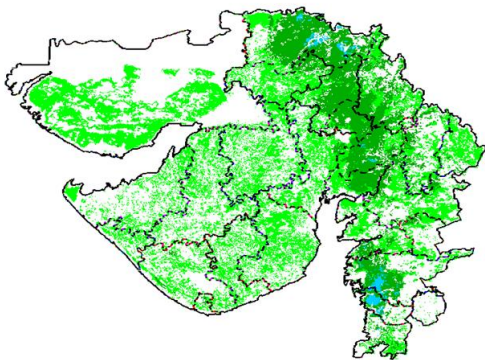
Eastern part of Bihar shows comparatively a high value (0.4-0.5) of NDVI, whereas normal value of NDVI is observed over the remaining parts of the state.

Delhi



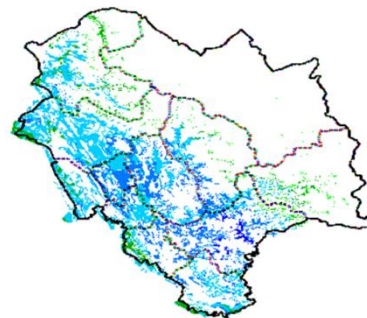
Agriculture vigour is normal all over Delhi where NDVI value lies between 0.2-0.3.

Gujarat



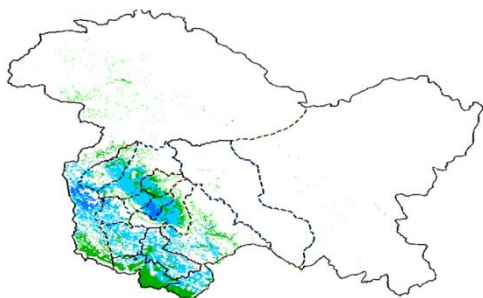
Agriculture vigour is normal (NDVI 0.2-0.4) over entire Gujarat.

Himachal Pradesh



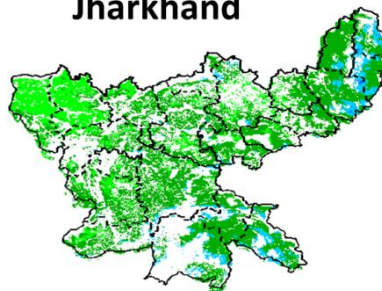
Agriculture vigour is very good over south and south western parts of Himachal Pradesh with NDVI value varying between 0.5-0.6, whereas isolated patches of normal NDVI are observed over remaining parts of the state.

Jammu & Kashmir



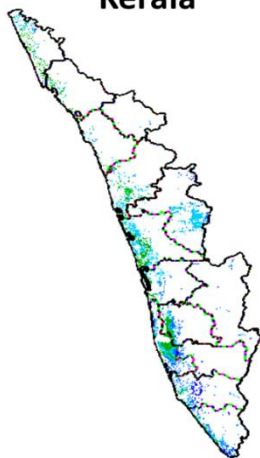
Agriculture vigour is normal all over Jammu and Kashmir. NDVI value varies in between 0.4-0.6 in south western parts.

Jharkhand



Agriculture vigour is normal (0.2-0.3) over entire state of Jharkhand

Kerala



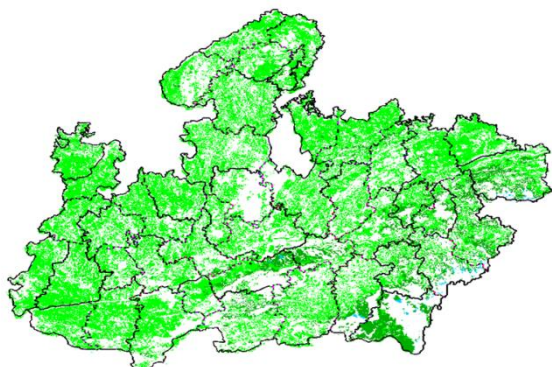
Central and coastal regions of Kerala shows increased NDVI values varying from 0.4 to 0.5, whereas rest of agricultural vigour of Kerala shows good values of NDVI.

Haryana



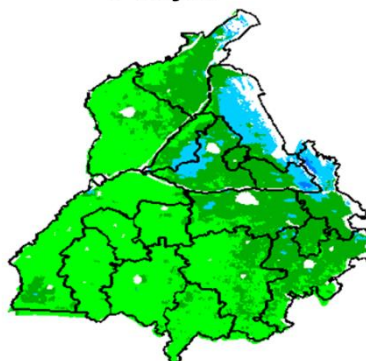
Agriculture vigour is normal over the state of Haryana. NDVI values varies between 0.2- 0.3 over the state. Except in few patches in northern region with NDVI values between 0.4-0.5.

Madhya Pradesh



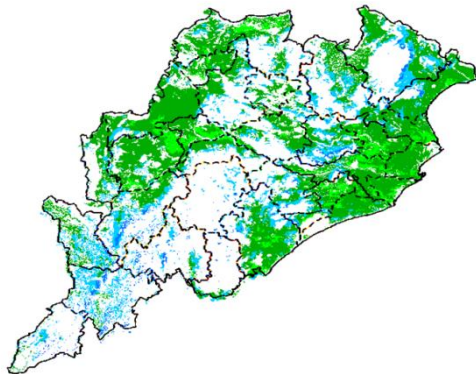
Agriculture vigour is normal (0.2-0.3) over entire state Madhya Pradesh.

Punjab



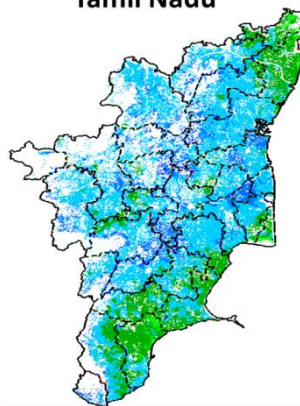
Agricultural vigour is normal over entire state of Punjab except North Eastern part, showing comparatively high NDVI value ranges from 0.4-0.6.

Odisha



Agricultural vigour is good in eastern coastal and few pockets in western and central parts of Odisha with NDVI value ranging between 0.4 - 0.6. The remaining parts show normal NDVI values.

Tamil Nadu



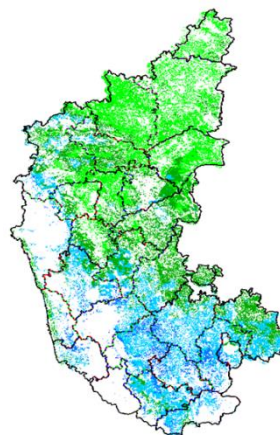
Agricultural vigour is good over Tamil Nadu with NDVI values varying from 0.4 - 0.6. Except North Eastern and South Eastern part, showing normal NDVI value ranges from 0.3-0.4.

Chhattisgarh



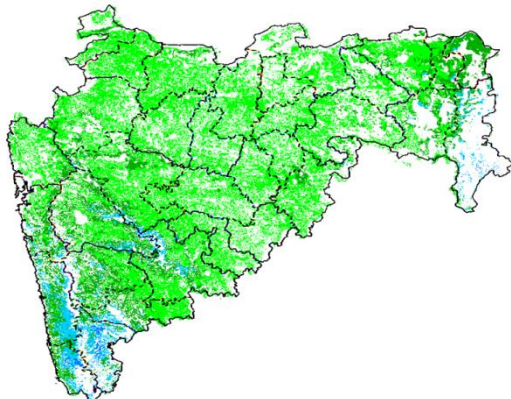
Agriculture vigour is Normal in central part of Chhattisgarh where NDVI value lies in between 0.2-0.3. South of state shows increased NDVI values in some pockets.

Karnataka



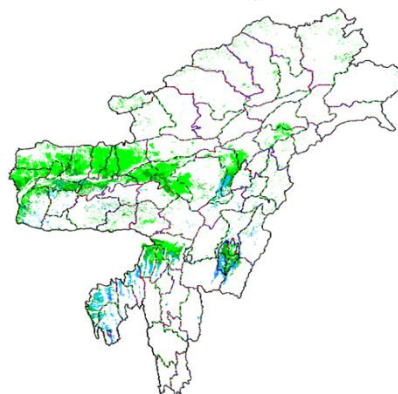
Agricultural vigour is good over south part of Karnataka between 0.4-0.6. Rest of the parts shows normal NDVI values from 0.2-0.3

Maharashtra

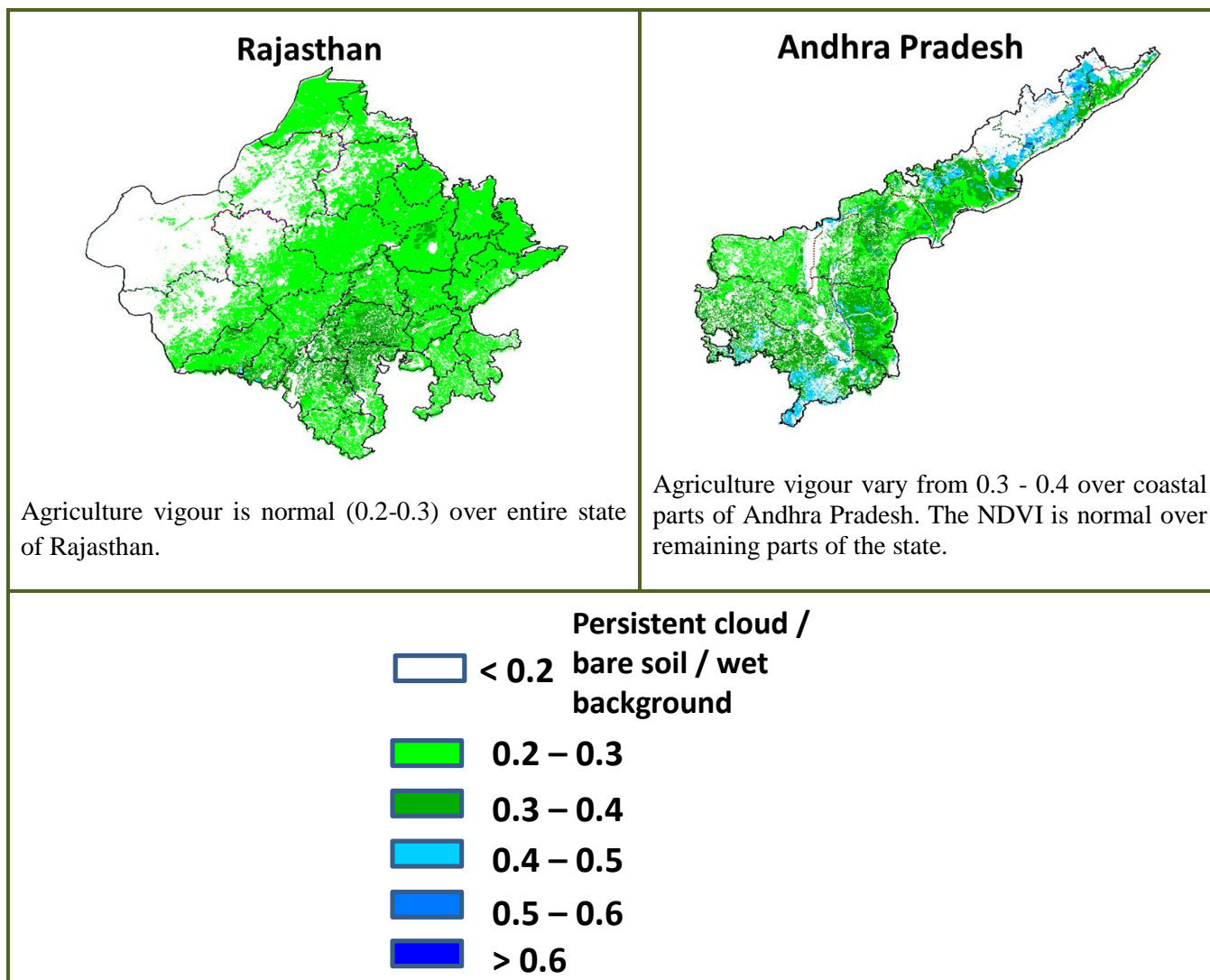


Agricultural vigour is good over south west part with NDVI values from 0.4 - 0.5, whereas NDVI is moderate over parts of Marathwada, Vidarbha and Madhya Maharashtra region.

North East Region



Agriculture vigour is good in valleys of North-East states which cover parts of Assam. NDVI values vary from 0.2-0.3. Normal NDVI conditions are observed all over NE region.



Annexure III

List of varieties

Karnataka

Ragi: GPU- 28,MR -01, 02 and 06, KMR-301.

Redgram: TTB -7, BRG -01, BRG- 02,HYD -3C.

Rice: Jaya, Rasi, BPT-5204

Tamil Nadu

Banana: poovan, rasthali, monthan, karpooravalli and neypoovan.

Kuruvai rice: ADT 36, ADT 43, ADT 45 and CO 51

Andhra Pradesh

Rice: MTU-1010, Nellore masuri, Dharani, Shwetha. Sannalu, Swarna, Vasundhara, Suraksha, Vijetha.

Varieties for Early Kharif Rice Plantings - Pushkala, Rasi, IR64.

Groundnut: Kadiri-6, Kadiri-9, Narayani and dharani.

Castor: PCH-111, PCH-222, Kranti, GCH-4, Haritha.

Assam

Sali/ kharif rice: Long duration high yielding varieties: Ranjit, Bahadur, Peoli, Moniram, Pankaj, Kushal , Swarna sub-1, Gitesh, Pankaj, Mashuri (for growing in typical lowland paddy area).

Medium duration paddy varieties : Satya and Basundhara (in medium lowland area).

Bau rice: Maguri, Panikekua, Amona, Negheri, Kekua, Pani Kekua, Padmapani.

Capsularis Jute: JRC 212, JRC 321(Sonali), JRC 7447 (Shyamali) and UPC 94(Reshma).

Olitorius Jute: JRO 524 (Navin), JRO 785 (Basudev), JRO 632(Baisakhtissa), Set-2 (Bahagi) and Tarun.

Papaya : Ranchi, Washington, Halflong, Coorg Honeydew.

Mesta : HC 583 and AMC 108.

Summer bottle gourd : Pusa Summer Prolofie long, Pusa Summer Profile round, Pusa Meghdoot and Pusa Manjiri.

Manipur

Soybean: JS-335.

Groundnut: ICGS-76.

Meghalaya

Sali/Kharif Rice: High Yielding Varieties : Shahsarang -1, Lampnah, IR 64, Ranjit, RCPL 1-412, RCPL 1-410, RCPL 1-411.

Local varieties: Mendri, Manipuri.

Groundnut: ICGS 76, JL 24.

Soybean: JS 335, Bragg, Ankur, Pusa Soubean-1, Local JS 2.

Nagaland

Lowland rice: Short to medium duration HYV rice : CAU R1, CAU R3, RCM-9 and RCM-11.

Maize : DA 61A, RCM-75, RCM-76 and HQPM-1.

Tripura

Groundnut: TAG 24, TG 37A, ICGS 76.

Maize: DMH- 849, 117, HQPM 1, BQPM 9.

West Bengal

Dry Seeded rice: Sabita Foundation, Swarna sub-1 certified, IR-64, Hira T.L.

Odisha

Sunflower: Morden, Sunrise, Surya and Hybrid varieties like KBSH-1, KBSH-3 and MSFH.

Onion: Nasik Red, Patna Red, Pune Red, Bellary Red, Pusa Ratnar, Pusa Madhavi, Arka Niketan ,Arka Pragati.

Ragi: HYVs. like Subhra, Vairabi, Dibyasingh, Nilachala, Subhra, Godavari and Chilka..

Sesame: Uma, Kalika, Kanak, Nirmala, Prachi, Usha.T.

Turmeric: Roma, Surama, Rang, Rashmi

Jute:JRO-524(Naveen).

Maize: Navjot, Shakti, Decan-107, Decan-109.

Bihar

Moong: Pusa Vishal, Samrat, SML-668, Sona varieties are recommended for moong.

Urad: Pant U-19 and Pant U-31,Ultra and Type-9 for Urad.

Maize: Suwan, Deevki, Ganga-11, Shaktiman-1 and Shaktiman-2.

Turmeric: Improved Varieties- Rajendran,Sonia, Rajender Sonali

Ginger: Improved varieties - Maran ,Nadia

Jharkhand

Summer rice: IR-36, IR-64, Naveen, lalat, Parijat (80-85 days).

Summer maize: Birsa Makka-1, Birsa Makka-2, Suwan-1(Hybrid), HQPM (Hybrid).

Green gram: mung S.M.L.- 668.

Sugarcane: BO 147.

Upland Rice: Birsa Dhan 108, Birsa Vikash Dhan109.110,111 & Vandana

Jammu & Kashmir

Onion: Agrifound Parvati, Pusa red, N-53.

Rice : IET-1410, K-39, Ratna, PC-19, Jaya, China-1039and Giza-14.

Maize: Vijay, Mansar, Him - 123, C 6 & C 8.

Uttarakhand

Tomato: VL Tomato-3, Pant T-3, Him Sona, Him Shikhar.

Capsicum: California Vander, Pus Dipti, Anupam. Heera, Indira, Supriya & Bharat.

Potato: Kufri- Jyoti, Ashok, Anand.

Moong: Pant Moong-2, Pant Moong-4, Pant Moong-5, Pant Moong-6, Narendra Moong-1.

Rice:long duration varieties like Pusa-44, Jaya, NDR-359, Sarju-52, PR-113, PR-114, Pant Dhan-18 or Pant Dhan-19.late varieties VL-Dhan-154, Vivek Dhan-62, Vivek Dhan-65, VL Dhan-81, Vivek Dhan-82 or VL-Dhan-85.

Finger millets: VL-Mandua-124 and VL-149. However, its short duration (i.e. 95 to 100 days) varieties like VL- Mandua-204, Pant Mandua-3, PES-176, PES-110, VL- Mandua-146

Bajra: PBN-83,YESHWANT (PBN-9), Pusa Composite 443, MP443.

Maize: Naveen, Sweta, Kanchan, Surya, Amar, Gaurav

Lobia: Pant Lobia-1 or Pant Lobia-2, UPC-5286, UPC-622, UPC-625 etc

Himachal Pradesh

Late variety of Cauliflower: broccoli.

Cauliflower: Pusa-snowwall.

Radish:Japanese white, Chinese pink and mino early white.

Capsicum: solan hyb-1,california wonder,yolo wonder ,vl shimla mirch-2.

Brinjal:plr-1,azad (hybrid), Arka Nidhi, Arka Keshav, Hisar Shaymal, PPC, F1 Chhaya, F1 Sandhya.

Tomato: solan gola, Palam Pink, Palam Pride, F1 Avtar, F1 Rakshita.

Chilli: Surajmukhi.

Sunflower: EC-68415.

Moong: Pusa Baishakhi.

Mash:UG-218.

Garden pea:PalamPriya, Azad P-1,PB-89, PalamSamool and Lincoln.

Carrot:Nantes and Chantenay.

Palak:PusaHarit, Pusa Bharti.

East Uttar Pradesh

Rice: sarayu-52, narendra-359, pant dhan-4, indrasan, NDR-97, pant dhan-12, narendra-80, ratna or pusa-35, mahsuri, swarna mahsuri, jal lahri, type-9, type-100, narendra-359, malviy dhan-36, narendra dhan-2026, narendra dhan-2064, narendra dhan-3112, sarju-52, pant dhan-4, Swarna, Pant-10, T-3, Poosa Basmati and Haryana Basmati.

Moong: samrat,hum-2, hum-12, malviyajanchetana, malviyajoyti, neredra moong-1.

Urad: T-9, azad urd-1, azadurd-2, shekher-2.

Sugarcane: coj-64, cos-96268, cos-98231, cos-767, cos-84, cos-32, copant-84212 ,etc.

Maize: pusa, agatishanker, makka-2, azad, uttam, sweta, Prakash, G-1, 5(hybrid varieties) and Tarun, Navin, Kanchan, Sweta and Jaunpuri (varieties for early sowing).

West Uttar Pradesh

Ladies finger:VRO-6, VRO-5

Rice:PRH 10, PB1, Pusa 1509, Sugandha5

Pigeon pea:T-21, UPAS 120

Cotton: H777, Dhanalakshami, HD107

For fodder Jowar: JS 120, Lobia 88

Punjab

Sugarcane: CoJ-85, CoJ-83, CoJ-64 (early maturing), COH-119, CoJ-88, CoS-8436 for and CoJ-89.

Rice: Pusa-44, T.R-112 and T.R-113.

Delhi

Cotton: H-777, H-974, H-1098.

Pigeonpea: Pusa 2001, Pusa991, Pusa992, Paras manak, UPAS 120.

Rajasthan

Sugarcane: (late sown): COL8001.

Groundnut: RG 425, RG382, HNG10, GG20, TG37, TG39, M-13.

Kharif Onion N-53 , Agrifound Dark Red

Okra: Ark abhay, Parbhani kranti, Pusa makhmali

Guar: RGC-936,986,1002,1017,HG -365,563,Hg2-20

Cotton: Hybrid varieties are- Hybrid-4, Hybrid-8 and Bikaneri Narma.

Maize: Hybrid varieties are-Mahi Dhawal, PEHM- 2, Pratap Hybrid Maize-1, Pratap Makka-3, Pratap Makka-5, Bio-9637, Bio-9681, Pratap HQPM-1, Pratap Hybrid Maize-3, Pratap Makka-9.

Gujarat

Green gram: GM-3, GM-4, K-851.

Black gram: T-9, GU-1.

Cowpea: Gujarat cowpea-1, 2, 4, Pusa Falguni.

Pigeon Pea: Vaishali, GT-100, GTH-1, BHSR-711.

Ginger: Athira.

Irrigated Hybrid cotton: G. cot. 6, 8, 10.

Irrigated B.T. Cotton : Gujarat Talod Hirsutam Hybrid -49 (Bolegaurd-2) or Govt. approved varieties.

Rainfed cotton: (North Saurashtra Zone) Early: Bg-II GCH-8, Agritop-333, Jay, Beejdhan-2, Sarju Atom, Bhakti, Medium Late:Bg-II GCH-6, , Agritop-444, Solar-76, Swapna, Mallika Late:Bg-II Ajit-155, , RCH-II, Vikram-5,Uttam, Mangla; ANKUR-651 (Middle Gujarat Zone).

Groundnut (irrigated): GG-20, GG-11,GG-7.

Kharif groundnut rainfed (North Saurashtra Zone): Semi spreading, GG-20, Bunch: GG-2, GG-5, TAG-24, TG-37 A, TPG-41, TLG-45.

Madhya Pradesh:

Soybean: JS 95-60 (early), JS 93 -05 (Medium), JS 335 (Late).

Redgram: TJT 501, ICPL 87 (early) and JKM 189 (Medium).

Groundnut: TG 22, TG 26, JGN 3.

Chhattisgarh:

Rice: Purnima, Danteswari, Shabagi, MTU 1010, MTU 1001, Suwarna.

Brinjal: Punjab Shadabahr, KS 331, PH 5, PH 6, KS 224, ARBH 543.

Tomato: Pusa early dwarf, Sweet 72, Pusa rubi, Pusa Gurab, Mangala, Naveen, Laxmi 5005 & NS 815.

Soybean: J.S. 335, Indira Soya-9, J.S. 80-21, J.S. 93-05.

Groundnut: SB -11 (J 11), ICGS-37, ICGS-44, T.A.G- 24, T.A.G-28.

Til: T.K.G-21, T.K.G-22, T.K.G-55, T.K.G-8.