



National Agromet Advisory Service Bulletin



Friday 22nd January 2016
(For the period 22nd to 26th January 2016)

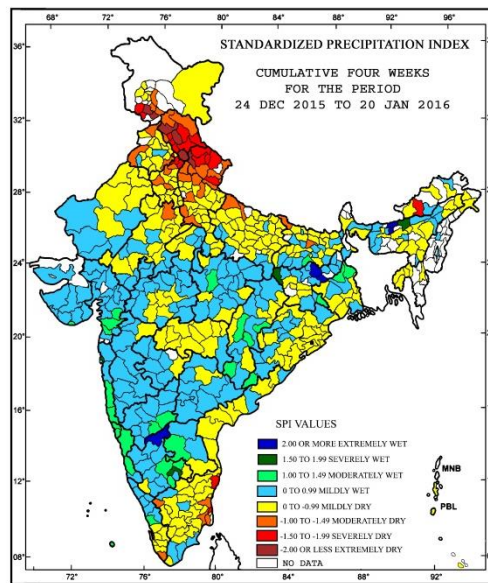


Issued by
National Agrometeorological Advisory Service Centre,
Agricultural Meteorology Division,
India Meteorological Department, Shivajinagar, Pune.

Weblink For
District AAS Bulletin: <http://www.imdagrimet.gov.in/node/3545>
State Composite AAS Bulletin: <http://www.imdagrimet.gov.in/node/3544>

Standardised Precipitation Index Four Weekly for the Period 24th December 2015 to 20th January 2016

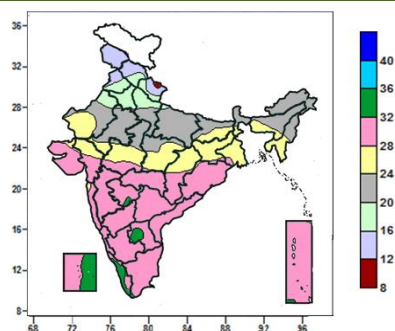
MINISTRY OF EARTH SCIENCES
INDIA METEOROLOGICAL DEPARTMENT
HYDROMET SECTION, PUNE



- Extremely/severely wet conditions experienced in Nalbari, Udalgiri, Baksa districts of Assam; Dhanbad, Garhwa, Giridih districts of Jharkhand; Mumbai Suburban district of Konkan & Goa; Bangalore Rural, Bellary districts of Karnataka;
- Extremely/Severely dry conditions experienced in most districts of Himachal Pradesh; many districts of Uttarakhand; few districts of Jammu & Kashmir; East Kameng district of Arunachal Pradesh; Kanchipuram, Nagapattinam districts of TamilNadu & Puducherry.
- Moderately dry conditions experienced in many districts of Uttarakhand; few districts of Himachal Pradesh; West Champaran, Samastipur districts of Bihar; Bahraich, Kheri, Agra, Bijnor, Bulandshahar, Mathura, Moradabad, Muzaffarnagar, Saharanpur districts of Uttar Pradesh; Ferozepur, Gurdaspur, Patiala, Ropar districts of Punjab; Anantnag, Doda, Ramban districts of Jammu & Kashmir; Alwar district of Rajasthan; Trivandrum district of Kerala;
- Rest of the country experienced moderately wet/ mildly wet / mildly dry conditions.

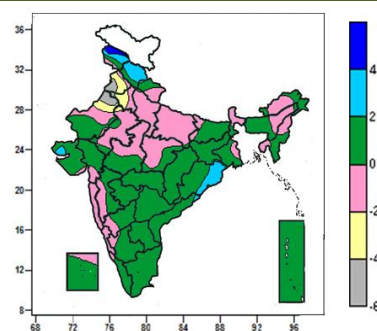
Contour maps for Mean Maximum and Minimum Temperature and their anomaly for the week ending on 20.01.2016

Actual Mean Maximum Temperature ($^{\circ}\text{C}$) in India for the week ending 20.01.2016



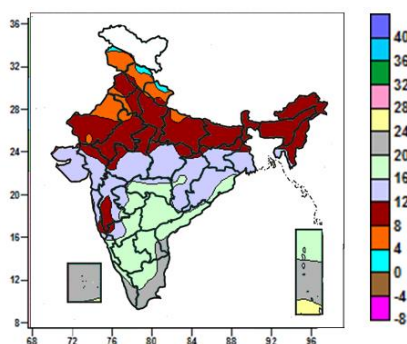
- Mean maximum temperature was between 32 to 36 $^{\circ}\text{C}$ over many parts of Kerala, some parts of Lakshadweep and isolated pockets of Marathwada, Rayalaseema and South Interior Karnataka.
- Mean maximum temperature was between 24 to 32 $^{\circ}\text{C}$ over rest of the country except Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Delhi, Uttar Pradesh, Arunachal Pradesh, many parts of Rajasthan, Bihar, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Nagaland, Manipur, some parts of Madhya Pradesh, where it was between 12 and 24 $^{\circ}\text{C}$.

Mean Maximum Temperature ($^{\circ}\text{C}$) Anomaly in India for the week ending 20.01.2016



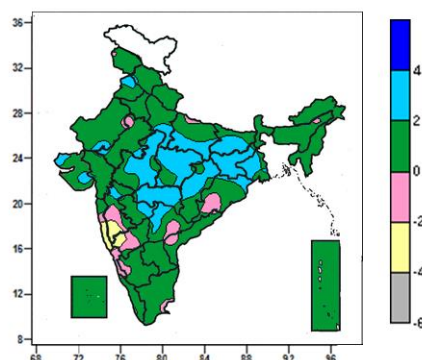
- Mean maximum temperature was above normal by 4 to 6 $^{\circ}\text{C}$ over isolated pockets of Jammu & Kashmir.
- Mean maximum temperature was above normal by 2 to 4 $^{\circ}\text{C}$ over many parts of Himachal Pradesh, some parts of Jammu & Kashmir, Odisha and isolated pockets of Kutch.
- Mean maximum temperature was below normal by 2 to 4 $^{\circ}\text{C}$ over some parts of Haryana and isolated pockets of Punjab, Delhi and West Rajasthan.
- Mean maximum temperature was below normal by 4 to 6 $^{\circ}\text{C}$ over isolated pockets of Punjab and West Rajasthan.
- It was normal to near normal in remaining parts of the Country.

Actual Mean Minimum Temperature ($^{\circ}\text{C}$) in India for the week ending 20.01.2016



- Mean minimum temperature was between 0 to 4 $^{\circ}\text{C}$ over isolated pockets of Jammu & Kashmir, Himachal Pradesh and Uttarakhand.
- Mean minimum temperature was between 4 to 8 $^{\circ}\text{C}$ over many parts of Jammu & Kashmir, Himachal Pradesh, Uttarakhand, some parts of West Rajasthan and isolated pockets of Punjab, Haryana, East Rajasthan, Uttar Pradesh.
- Mean minimum temperature was between 8 to 12 $^{\circ}\text{C}$ over Bihar, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, many parts of Punjab, Haryana, Delhi, Uttar Pradesh, Rajasthan, Mizoram, some parts of West Madhya Pradesh, Madhya Maharashtra and isolated pockets of Himachal Pradesh, Uttarakhand,

Mean Minimum Temperature ($^{\circ}\text{C}$) Anomaly in India for the week ending 20.01.2016



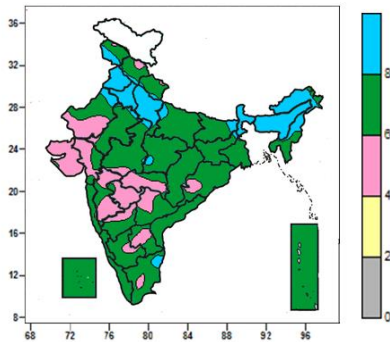
- Mean minimum temperature was above normal by 2 to 4 $^{\circ}\text{C}$ over Jharkhand, many parts of Bihar, Madhya Pradesh, Vidarbha, Gangetic West Bengal, Chhattisgarh, some parts of Uttar Pradesh, Marathwada, Telangana and isolated pockets of Punjab, Rajasthan, Saurashtra & Kutch, Madhya Maharashtra, Marathwada, Odisha and Telangana.
- Mean minimum temperature was below normal by 2 to 4 $^{\circ}\text{C}$ over many parts of Goa, some parts of Konkan, Madhya Maharashtra and North Interior Karnataka.
- It was normal to near normal in remaining parts of the country.

Jharkhand, Gangetic West Bengal, Tripura, East Madhya Pradesh, Chhattisgarh, Gujarat region and Konkan & Goa.

- Mean minimum temperature was between 12 to 20°C over rest of country except Lakshadweep, many parts of Kerala, Tamil Nadu, Andaman & Nicobar Islands and isolated pockets of Coastal Andhra Pradesh, Rayalaseema where it was 20 to 28°C.

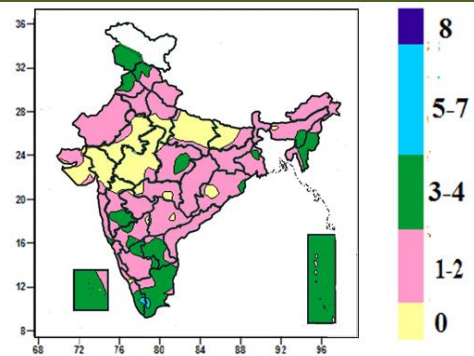
Contour maps for Relative Humidity, Cloud amount and Wind speed for the week ending on 20.01.2016

Relative Humidity (%) over India for the week ending 20.01.2016



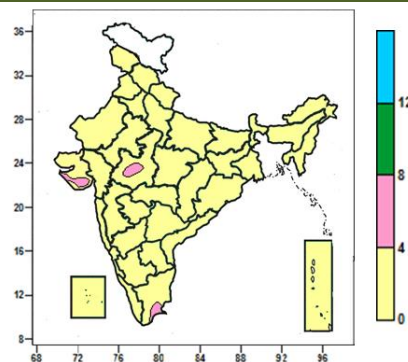
- Mean Relative humidity was above 80% over Punjab, Haryana, Delhi, Sub-Himalayan West Bengal & Sikkim, many parts of West Uttar Pradesh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, some parts of Manipur and isolated pockets of Jammu & Kashmir, Himachal Pradesh, Uttarakhand, East Uttar Pradesh, Rajasthan, Bihar, Jharkhand, East Madhya Pradesh and Tamil Nadu.
- Mean Relative humidity was between 40 to 80% over rest of the country.

Cloud amount (okta) over India for the week ending 20.01.2016



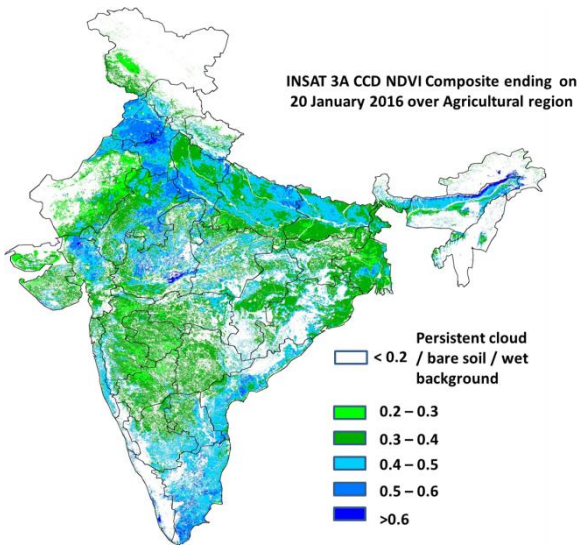
- Sky remained generally cloudy (5-7 okta) over isolated pockets of Kerala and Tamil Nadu
- Sky remained partly cloudy (3-4 okta) over Jammu & Kashmir, Manipur, Mizoram, Andaman & Nicobar Islands, many parts of Punjab, Rayalaseema, Tamil Nadu, Kerala, Lakshadweep, some parts of Himachal Pradesh, East Madhya Pradesh, Madhya Maharashtra, Interior Karnataka and isolated pockets of Gangetic West Bengal, Assam.
- 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 20.01.2016



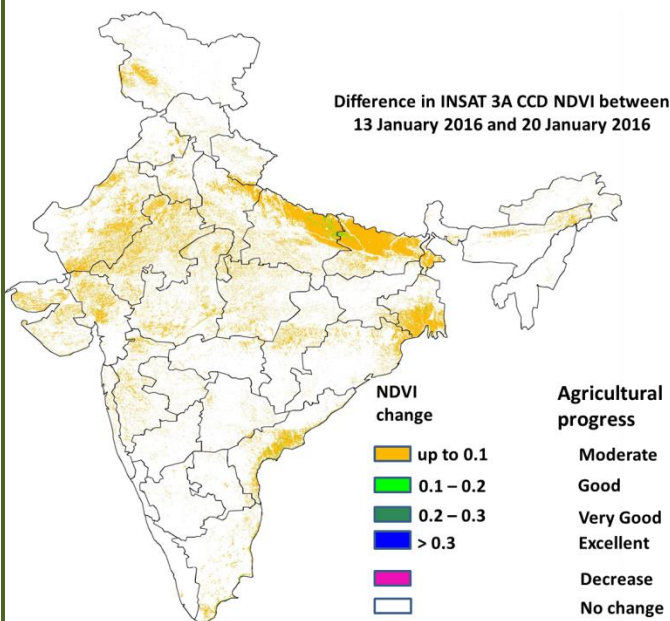
- Mean wind speed was 4 to 8 knots over some parts of Saurashtra, isolated pockets of West Madhya Pradesh and Tamil Nadu.
- It was less than 4 knots over rest of the country.

INSAT 3A CCD NDVI COMPOSITE ENDING ON 20th January 2016 OVER AGRICULTURAL REGION OF INDIA



- Agricultural vigour is good over Punjab, Haryana, Uttar Pradesh, Gujarat, East Rajasthan Madhya Pradesh, Andhra Pradesh, Tamil Nadu, Kerala, Assam, Odisha, Coastal Maharashtra, patches in Vidarbha and South Interior Karnataka where NDVI varies from 0.4 to 0.6. Agricultural growth was moderate 0.2 to 0.4 over most parts of West Rajasthan, Saurashtra, Telangana, Bihar, West Bengal and Madhya Maharashtra.

Difference in INSAT 3A CCD NDVI between 13th and 20th January 2016



- Moderate progress in NDVI was observed in the States of Uttar Pradesh, Bihar, Rajasthan, East Madhya Pradesh, Coastal Andhra Pradesh, West Bengal and Gujarat. No change in NDVI was observed in Central India, Maharashtra, Odisha, Tamil Nadu, Kerala and Karnataka.

- INSAT 3A CCD NDVI composite maps for the week ending on 20th January 2016 for different States are given below in Annexure II.

Weather Forecast for next 5 days valid upto 0830 hours of 27th January 2016

- Meteorological sub-division wise detailed 5 day rainfall forecast is given below.
- Moderate to dense fog very likely at a few places over Punjab, Haryana, Chandigarh & Delhi, north Rajasthan, Uttar Pradesh, north Madhya Pradesh, Bihar, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during next 2 days.
- Maximum temperatures very likely to rise by 2-3°C over plains of northwest and central India during next 2-3 days.
- Minimum temperatures very likely to fall by 1-2°C over at many places over Telangana, north Coastal Andhra Pradesh, North Interior Karnataka, Madhya Maharashtra and Marathwada during next 24 hours.

5 Day Rainfall Forecast (MID DAY) 22nd January 2016

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

% 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

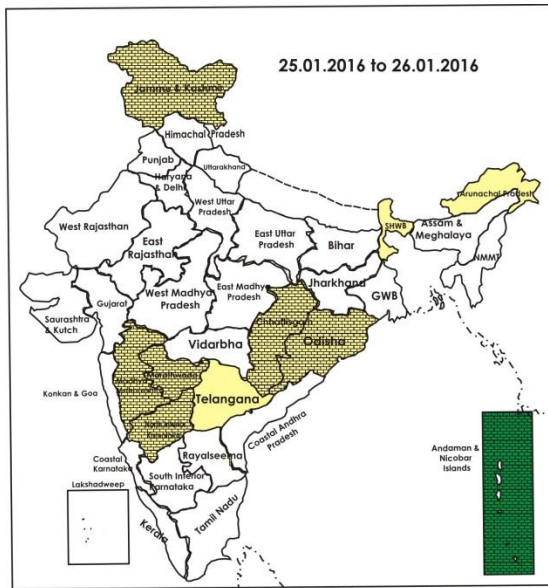
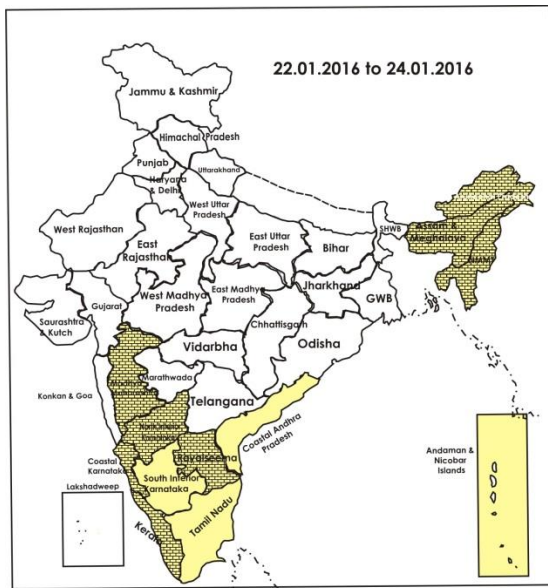
- **22 January (Day 1):** Dense to very dense fog very likely at a few places over Bihar and Sub-Himalayan West Bengal & Sikkim and at isolated places over Punjab, Haryana, Chandigarh & Delhi, north Rajasthan, Uttar Pradesh, north Madhya Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Cold day conditions very likely at isolated places over Uttar Pradesh and Madhy Pradesh. Cold wave conditions very likely at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh, Odisha and Marathwada.

- **23 January (Day 2):** Dense to very dense fog very likely at a few places over Bihar and Sub-Himalayan West Bengal & Sikkim and at isolated places over Punjab, Haryana, Chandigarh & Delhi, north Rajasthan, Uttar Pradesh, Madhya Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Cold wave conditions very likely at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh and Odisha.
- **24 January (Day 3):** No weather warning.
- **25 January (Day 4):** No weather warning.
- **26 January (Day 5):** No weather warning.

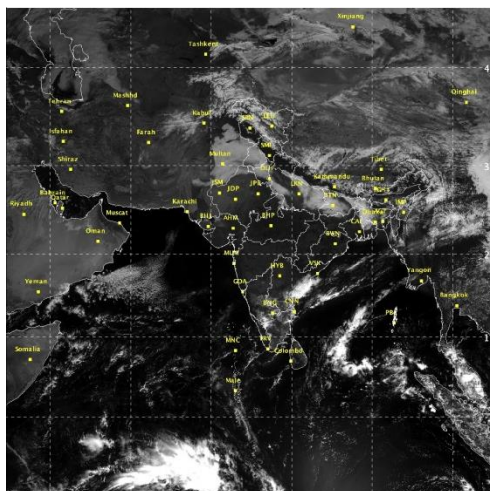
Weather Outlook for subsequent 2 days from 27th to 29th January 2016

- Rain/thundershowers likely at isolated places over Odisha, West Bengal & Sikkim, northeastern state and extreme south peninsular India.

Weather Forecast Map (Valid upto 0830 hours of 27th January, 2016)



Satellite image dated, 22.01.2016 0600 UTC



Salient Advisories

- As cold wave conditions is very likely at isolated places over **Madhya Pradesh, Chhattisgarh, Vidarbha and Odisha** on 22nd and 23rd and over **Marathwada** on 22nd January, apply light and frequent irrigation /sprinkler irrigation in the evening to protect the crops from frost / cold injury. To protect young fruit plants from chilly winds, cover young fruit plants with straw/polythene sheets/ gunny bags. Apply black plastic sheet mulching in orchard crops.
- In **Madhya Maharashtra**, as prevailing minimum temperature is 5^oC in Nasik district and also fall in temperature is expected by 1-2^oC, apply light and frequent irrigation in grapes during night hours to avoid fruit cracking. Also arrange for smoking around the vineyards in the early morning hours. In **Marathwada**, as minimum temperature is prevailing below 10^oC in Parbhani & Nanded districts, apply light irrigation to banana, fig orchards during night time and arrange for smoking around the field early in the morning. Cover the banana bunch with 6% perforated white plastic bag.
- As dense to very dense fog is very likely to occur at a few places over **Bihar and Sub-Himalayan West Bengal & Sikkim** on 22nd and 23rd January and dense fog very likely at isolated places over **Punjab, Haryana, Chandigarh & Delhi, north Rajasthan, Uttar Pradesh, Madhya Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram, Tripura** on 22nd and 23rd January, there is chance of incidence of early blight disease in potato, tomato and onion crops. Monitor the crops and if symptoms are noticed, undertake plant protection measures.
- In **Jammu & Kashmir**, in view of the prevailing above normal maximum temperature conditions, apply irrigation in wheat crop.
- In Western Zone of **Punjab**, in view of the prevailing low minimum temperature, it is advised to provide polythene sheet/sarkanda/kahi rice straw mulching in the fields of tomato seedlings to protect plants from cold/frost injury and in Undulating Plain Zone, protect newly planted fruit plants from low night temperature and cover the nursery/young fruit plants with rice straw, thatches, plastic sheet etc.
- In **Assam**, complete transplanting of *boro* rice.
- In Intermediate Zone of **Jammu & Kashmir**, prevailing above normal maximum temperature condition is favourable for yellow rust in wheat. Constant monitoring of the crop is advised. Also due to humid weather, there may be incidence of early and late blight in potato crop and *Alternaria* blight in mustard, to control apply Mancozeb @ 2.5 g/litre of water and Ridomil MZ @ 2.5 g/litre of water alternately.
- In Sub-Montane and Low Hills Sub-Tropical Zone of **Himachal Pradesh**, due to prevailing temperature condition, there may be chances of attack of yellow rust and aphids in wheat crop. For control of yellow rust, spray Tilt @ 1ml per litre of water and spray Cypermethrin 10 EC @ 30 ml per 30 litre of water per kanal area for aphids.
- In Western, Central and Undulating Plain Zone of **Punjab**, there may be chances of aphids in mustard crop; to

control spray 40g Actara 25 WG or 400 ml Rogor 30EC in 80-125 lit of water per acre.

- In Central Brahmaputra Valley Zone and North Bank Plain Zone of **Assam**, cloudy and foggy weather condition is congenial for appearance and spread of leaf blight disease in potato. Spray with Mancozeb 75% a.i. @ 2.5 g/litre of water against late blight.
- In view of the prevailing cold wave conditions in **Madhya Pradesh** and **Chhattisgarh**, provide fodder/feed mixed with minerals etc. and fresh water to milch animals. Keep animals in shed during night time. Hang gunny bags in the cattle and poultry house to prevent cold air in. Provide extra lighting in Poultry sheds.

Detailed Zonewise Agromet Advisories

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



Banana



Groundnut



Rice



Cotton

- **Realised Rainfall:** Weather remained mainly dry over the region.

- **Advisories:**

- **Tamil Nadu:**

- In the Western Zone, as mainly dry weather would prevail, undertake harvesting of pulses and rice.
- In the Cauvery Delta Zone, continue harvesting of matured *Samba* rice and sowing of rice fallow pulses under waxy condition (ADT 3 black gram variety and ADT 3 green gram variety) under rice fallow condition in *Samba* rice fields in Nagapattinam, Thanjavur, Thiruvarur and Trichy districts using the expected dry weather conditions.
- In the South Zone, undertake harvesting of sorghum and maize.
- In the North Western Zone, undertake sowing of black gram under rain fed condition with seed treatment with *Trichoderma viride* at the rate of 1kg/4kg seed before sowing.
- In the High Altitude Hilly Zone, continue mulching in standing crops to prevent cold injury/frost damage due to low temperature. In tea gardens, available plant leaves like silk oak tree can be used to mulch the crop.
- In the High Rainfall Zone, irrigate pepper plants by hose irrigation or daily by drip irrigation and continue harvesting of cloves and pepper and tapping of rubber and stake banana plants with bamboo poles to protect from wind.
- In the South Zone, incidence of yellow muranai mite and gall fly are noticed in chilli. Spray Ethion @ 2 ml/litre of water based on the intensity of the pest.

- **Andhra Pradesh:**

- In the North Coastal Zone, continue planting of sugarcane after sett treatment with Propiconazol @ 1ml/litre of water for 15 minutes before planting and nursery sowing/transplanting of *rabi* rice in the High Altitude Tribal Zone.
- In the Scarce Rainfall Zone, undertake harvesting of redgram and Bengal gram and continue transplanting of rice.
- In the North Coastal Zone, prevailing weather conditions (high humidity and decrease in temperature) are congenial for incidences of powdery mildew and stem blight in sesamum (germination to seedling stage). Spray Tridemorph @ 1 ml or Sulphur @ 3g/litre of water to control powdery mildew and Carbendazim @ 3.0 g /litre of water to control stem blight.
- In the Scarce Rainfall Zone, thrips damage and purple blotch incidence was noticed in onions. Spray Pipronil @ 2ml/litre of water to control thrips and Ridomil MZ @ 2g/litre of water to control purple blotch incidence.
- In the Southern Zone, prevailing dry weather conditions are congenial for incidence of mealy bugs in legume vegetables. To control the pest, spray Malathion @ 2 ml/litre of water or 5% Neem decotion.

- **Telangana:**

- In the Southern Telangana Zone, continue sowing of sesamum crop and short duration groundnut cultivars (TAG 24, K6) after seed treatment with Tebuconazole @ 2 g per kg seed. Prevailing low temperatures may cause cold injury in rice nurseries. To overcome cold injury and for better nursery growth, adopt the following measures: Cover the nursery beds with polythene sheet during night and remove in the morning, irrigate rice nursery bed every day in the evening and let out the water in the morning and apply 2 kg Urea for 200 sq metre

nursery 10-15 days after sowing.

- In the Northern Telangana Zone, continue nursery sowing of tomato, tomato(pusarubi, pusa early dwaft, marutham & Arka vikas) and sowing of sesamum, bhendi(Purbani kranthi, Arka anamika & Arka abhaya) and harvesting of chilli.
- In the Northern Telangana Zone, incidence of gall midge is noticed in chillies. Undertake spraying with Triazophos @ 2ml/litre of water to control gall midge

▪ **Karnataka:**

- Continue sowing of pulses like black gram, green gram and green manure crop sun hemp utilizing the residual moisture in Hill Zone.
- As rainfall is expected at few places in North Dry Zone, postpone harvesting of pigeon pea, chickpea and chilli.
- In the North East Transition Zone, as mainly dry weather is prevailing, apply protective irrigation to wheat (flowering/milk stage), *rabi* sorghum (ear Head Emergence) and safflower (pod formation). Continue harvesting of pigeon pea, Bengal gram and Niger. Continue intercultural operations in brinjal.
- In North Transition Zone, in view of the prevailing mainly dry weather, apply irrigation to wheat (late Jointing / flowering stage), early sown sorghum (flowering / grain filling) and chickpea (flowering to pod formation). Complete harvesting of matured sugarcane. Undertake sowing of Co-8014 and Co-740 varieties of sugarcane during January and February.
- In Central Dry Zone, due to humid weather, there is chance of bacterial leaf blight in pomegranate; spray the crop with Streptomycin Sulphate @ 0.5 g + Copper Oxy-Chloride @ 2 g dissolved in one litre of water. Then take up spraying of micro nutrients viz. Zinc Sulphate @ 1 g + Magnesium Sulphate 1 g + Borax 1 g + Calcium 1 g dissolved in one litre of water.
- As moderately cloudy and high humid condition, there is chance of leaf spot disease in safflower, powdery mildew in grapes in North Dry Zone; spray Mencozeb 75 WP @ 2 g in one litre of water for control of leaf spot and spray Azoxysprobin @ 1 ml in one litre of water for control of powdery mildew on non-rainy day.
- In the Southern Dry Zone and Eastern Dry Zone, low temperature in morning hours is congenial for attack of leaf hopper and powdery mildew disease in mango; spray Carbaryl 50 WP @ 4g/litre of water or Imidachlorpid @ 0.3ml/ litre of water for management of leaf hopper and Lamda Cyhalothrin 5 EC @ 0.5 ml/litre of water or Sulphur dust (SULTAF) 80 W @ 3g/litre of water to manage powdery mildew disease.

▪ **Kerala:**

- In the Central Zone, undertake mulching in coconut and pepper gardens, continue land preparation for sowing *puncha* rice.
- Continue sowing of vegetable crops like amaranths, bitter gourd, cucumber, water melon, snake gourd, bottle gourd etc., and harvesting of coconut, arecanut, pepper, cardamom, ginger and coffee in the High Altitude Zone. Provide heavy irrigation to cardamom once a fortnight and to vegetables once in 3-4 days. Continue tapping of rubber in the Southern Zone.
- In the Problem Area Zone, present weather condition is congenial for incidence of sigatoka leaf spot in bananas. Spray Carbendazim @ 0.05 per cent or give alternate spray soon after the appearance of initial symptoms of the disease. Three to four sprays at fortnightly intervals are to be given depending on the severity of disease.
- In the Southern Zone, prevailing dry weather conditions are congenial for incidence of white ear in rice (panicle initiation stage). If the disease is very severe, spray Flubendamide (Fame) @ 2 ml/20 litre of water.
- In the Central Zone, there is chance of incidence of leaf eating caterpillar in banana. Spray Quinalphos @ 2ml in one liter of water.
- Suitable varieties for sowing are given in Annexure III.

• **Animal Husbandry**

- Maintain the optimum room temperature in poultry houses in the North East Transition Zone of Karnataka and in sericulture, poultry and dairy unit in Eastern Dry Zone.

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



Mustard



Transplanting of Boro rice



Okra



Cabbage

- **Realised Rainfall:** Weather remained mainly dry over the region.

• **Advisories:**

- As dense to very dense fog is very likely at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura on 22nd & 23rd January, there is chance of incidence of late blight disease in potato, tomato

and onion crops and other standing crops for incidence of pest and diseases. Monitor the crops and if symptoms are noticed, undertake plant protection measures.

▪ **Assam, Meghalaya & Arunachal Pradesh:**

- In Lower Brahmaputra Valley Zone and Upper Brahmaputra Valley Zone of Assam, complete transplanting of *boro* rice. Maintain 3cm depth standing water after 2-3days of transplanting of *boro* rice. Also farmers are advised to filling the gaps as early as possible.
- In Upper Brahmaputra Valley Zone of Assam, continue land preparation for sowing of ridge gourd and okra.
- In Hill Zone, continue raising of coconut seedlings.
- In Meghalaya, undertake transplanting of *boro* rice and harvesting of ginger/ turmeric. Replanting of dead hills or gap filling with seedlings of similar age of *boro* rice should be done within 7-10 days of transplanting.
- In Arunachal Pradesh, cover the tomato crops with polyethene/cloth during night time to avoid cold/frost injury. Apply mulching with crop residue in mustard crops for conservation of soil moisture. Make provision for life-saving irrigations in some places in East Kameng district.
- In Hill Zone Assam, foggy and humid weather is favorable for attack of late blight in tomato. Apply Ridomil MZ-72 (2g/litre) and Indofil M-45 @ 2.5g/litre against late blight in tomato.
- In Upper Brahmaputra Valley Zone, Central Brahmaputra Valley Zone, North Bank Plain Zone and Barak Valley Zone of Assam, humid weather is favorable for attack of aphid/saw fly in rapeseed/ mustard To control aphid spray Dimethoate 30 EC or Chlorpyrifos 20 EC @ 0.5 litre per ha area.
- In Barak Valley Zone of Assam, due to cloudy weather, there is chance of late blight in tomato. To manage the blight in tomato, apply Ridomil or Indofil @ 2 gm per litre of water.
- In Central Brahmaputra Valley Zone and North Bank Plain Zone of Assam, cloudy and foggy weather condition is congenial for appearance and spread of leaf blight disease in potato. Spray with Mancozeb 75% a.i. @ 2.5 g/litre of water against late blight. Farmers are also advised to apply Indofil M-45 @ 2.5g/litre of water to protect wheat crop from Helminthosporium leaf blight at booting/heading stage.
- In Lower Brahmaputra Valley Zone of Assam, there is chance of stem borer infestation in *rabi* maize and blast in wheat. Spray Phosphamidon 100 EC @ 500 ml in 700 litre of water, Fenitrothion 50 EC @ 1litre in 700 litre of water against stem borer in *rabi* maize and spray 2 gm Bavistin /litre of water against blast in wheat.
- In Meghalaya, in the prevailing weather attack of aphids is observed in mustard and rapeseed, spray Chlorpyrifos 20 EC or Dimethoate 30 EC @2 ml/lit of water for control. Also prevailing weather is congenial for incidence of attack of diamond black moth in cabbage and cauliflower and powdery mildew in pea. Spray Neem seed Kernel Extract@ 5% or Chlorpyrifos 20%EC @ 2ml/litre of water. Spray wettable Sulphur @ 2 g/litre of water or Dinocap @ 1 ml/litre of water or dust Sulphur @ 25 kg/ha against powdery mildew in pea.

▪ **Nagaland, Manipur, Mizoram and Tripura:**

- In Manipur, continue transplanting of tomato.
- In Mizoram, continue transplanting of brinjal and chilli. Continue sowing of pea and harvesting of banana, French bean, cowpea, ginger, turmeric and khasi mandarin.
- In Nagaland, apply light irrigation in the evening to protect lentil, linseed, mustard, citrus, orchard crop and cole crops from cold/frost injury. Keep the fields weed free as the weeds blocks the sunlight and heating of the soil during daytime.
- In Tripura, provide light irrigation with mulching in mustard and lentil. Continue transplanting of *boro* rice. Weeding, thinning, watering may be done in rice nurseries. Nursery beds may be covered during the night to protect the seedlings from dew.
- In Mizoram, in banana, apply neem powder against corm weevil and stem weevil.
- In Manipur, due to humid weather condition there is chance of attack of early blight in potato. Spray Mencozeb @ 2 g/litre of water.
- In Tripura, due to foggy weather, there is chance of attack of late blight in potato, leaf blight in maize, mili bug attack in mango and blight in tomato. Spray Indofil M-45 @ 2.5gm per litre of water against late blight in potato, spray Zineb @ 3gm per litre of water for control of leaf blight in maize, spray Monocrotophos @1.5 ml per litre of water may sprayed to manage mili bug attack and spray Ridomil or Indofil or Mancozeb @ 2 gm per litre of water against blight in tomato.
- Suitable varieties are given in Annexure III.

• **Animal Husbandry**

- In Northeastern states, cover poultry house with gunny bags/polythene sheet to prevent the expose of animal to cool night. Provide artificial heating through lighting of electric bulb @ 2 watt/chick in damp cold areas or during night time to protect the poultry birds (day old to 25 days old) from low temperature.
- Undertake regular immunization of cattle & buffaloes against Foot & Mouth disease, Haemorrhagic septicaemia & Black Quarter.

• **Fishery**

- In Assam, apply Potash @ 4-5 mg/litre of water, Sukrena WS @ 1 litre per bigha of water and lime in required doses to protect the fish population against various bacterial diseases prevalent in winter season.

WEST INDIA [GOA, MAHARASHTRA, GUJARAT]



Cotton



Sugarcane



Groundnut



Wheat

- **Realised Rainfall:** Weather remained dry over the region.
- **Advisories:**
 - As cold wave conditions is very likely at isolated places over Vidarbha on 22nd & 23rd and over Marathwada on 22nd January, apply light and frequent irrigation /sprinkler irrigation in the evening to protect the crops from frost / cold injury. To protect young fruit plants from chilly winds, cover young fruit plants with straw/polythene sheets/ gunny bags. Apply black plastic sheet mulching in orchard crops.
 - **Maharashtra:**
 - In Konkan, in *rabi* rice, maintain water level 3-5 cm. Apply light irrigation to groundnut and sunflower.
 - In Madhya Maharashtra, as prevailing minimum temperature is 5⁰C in Nasik district and also fall in temperature is expected by 1-2⁰C, apply light and frequent irrigation in grapes during night hours to avoid fruit cracking. Also arrange for smoking around the vineyards during in the early morning hours. The minimum temperature is prevailing below 10⁰C at Pune, Jalgaon, Ahmednagar, Dhule, Nandurbar and Nasik districts, hence apply irrigation to banana orchard in the night hours. Apply used farm organic material as a mulch. Burn farm trash to generate smoke near the orchard in the early morning hours. Apply neem cake @ 250 g to 1000 g per plant. Also cover banana bunch by 6% perforated white colour plastic bags. Apply irrigation to wheat, vegetables, jowar, gram and orchards. Apply irrigation to onion crop at an interval of 6-8 days. Continue harvesting of old adsali and preseasonal sugarcane. Continue land preparation for sowing of summer groundnut and plantation of new *suru* sugarcane. Undertake sowing of pearl millet.
 - In Marathwada, as minimum temperature is prevailing below 10⁰C in Parbhani & Nanded districts, apply light irrigation to banana, fig orchards during night time and arrange for smoking around the field early in the morning. Cover the banana bunch with 6% perforated white plastic bag. Collect dry leaves of fig & clean the orchard. To protect dropping of grain size mango fruits due to low temperature, spray Gibberellic acid (50 PPM) @ 50 ml per litre of water. To protect grapes from fruit cracking due to low temperature, spray Cytosine (10%) @ 2 ml per litre of water. Apply irrigation to wheat, safflower and gram. Continue harvesting of old adsali and preseasonal sugarcane.
 - In Vidarbha, as minimum temperature is prevailing below 10⁰C in Vidarbha region and is likely to continue for next 2 days, apply light irrigation to banana, fig orchards during night time and arrange for smoking around the field early in the morning. Cover the banana bunch with 6% perforated white plastic bag. Collect dry leaves of fig & clean the orchard. Continue land preparation for sowing of summer groundnut. Apply irrigation after 45 and 65 days of sowing (at early tillering/ tillering stage) to wheat crop. Continue transplanting of summer rice in East Vidarbha. Apply irrigation to vegetable crops, gram and orchards like orange and sweet lime in Central Vidarbha region.
 - Due to partly cloudy weather in last three days Vidarbha region, there may be attack of pod borer in gram; spray 5% neem ark on the crop and after 10 to 15 days take a spray of Heliokil @ 500 ml per 500 litres of water per hectare.
 - Due to cold weather in Madhya Maharashtra, there may be incidence of powdery mildew in cucurbits crop, tomato, chilli, guar; spray 80% water soluble wettable sulphur @ 20 g per 10 litres of water. Cucurbits should not be sprayed with sulphur instead of that spray tridemorph @ 5 ml or denocap 10 ml per 10 litres of water.
 - **Gujarat:**
 - Carry out weeding in vegetable crops in Middle Gujarat Zone, in wheat, cumin, castor in North West Zone, in vegetable (brinjal, chilli, tomato, cabbage and cauliflower) and rice crops in South Gujarat Heavy Rainfall Zone.
 - In Gujarat, apply light irrigation to wheat, potato, mustard, castor, vegetable and fruit crops in North Gujarat Zone, to wheat, mustard, castor, orchards and vegetable crops in North West Zone, to wheat crop during evening hours in Bhal and Coastal Zone, to castor, Indian rapeseed and mustard crops in Middle Gujarat Zone, regular irrigation to sweet corn, gram (flowering/pod formation), cabbage/cauliflower in South Gujarat Heavy Rainfall Zone; regular irrigation to wheat (flowering/grain filling) in North Saurashtra Zone and wheat in South Saurashtra Zone.
 - Continue picking of matured cotton bolls in North West Zone of Gujarat.
 - Due to prevailing weather conditions there is chance of incidence of blight disease in potato and cumin in North Gujarat Zone; spray Mencozeb 0.2% @ 30 g plus 25 ml of concentrated desi soap solution in 10 litres of water. Spray next doses at an interval of 10 days.
 - Cold and dry weather favors incidence of thrips and mite in chillies in Middle Gujarat Zone; to control, spray

Spinosad 48% SC @ 3 ml and Abamectin 0.15% EC @ 10 ml in 10 litres of water alternately. Due to rise in temperature, there is chance of attack of aphids in Indian rapeseed and mustard; spray 0.1% Dimethoate 30 EC @ 10 ml with 10 litres of water to manage the sucking pests.

- In North Saurashtra Zone, *alternaria blight* and purple blotch disease infestation is observed in garlic crop; it is advised to increase periods in between irrigations and apply two sprays of Mancozeb @ 27 g or Thiophanae Methyl @ 12 g/10 litres of water at 10 days interval for control.
- Suitable varieties for sowing are given in Annexure III.
- **Animal Husbandry**
- Spread the crop residue in animal sheds to protect the animals from cold. Provide dry fodder twice a day to cattle and luke warm water to lactating animals. Keep young calves indoors during night time to avoid cold stress in Gujarat.

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



Seed bed preparation of rice

Wheat

Gram

Mustard

- **Realised Rainfall:** Rainfall occurred in Nicobar district of Andaman & Nicobar islands; Birbhum district of Gangetic West Bengal; Gaya and Nawada districts of Bihar; Garhwa district of Jharkhand. Weather remained mainly dry/dry over rest of the region.
- **Advisories:**
 - As dense to very dense fog is very likely at a few places over Bihar and Sub Himalayan West Bengal & Sikkim on 22nd and 23rd January, there is chance of incidence of early blight disease in potato, tomato and onion crops and other standing crops for incidence of pest and diseases. Monitor the crops and if symptoms are noticed, undertake plant protection measures.
 - **West Bengal:**
 - In Old Alluvial Zone, continue sowing of bottle gourd in pits filled with organic matter and sow 2-3 seeds per pit.
 - In Coastal Saline Zone, complete transplanting of *boro* rice in the main field with four to five seedlings per hill.
 - In Hill Zone, complete harvesting of Mandarin fruits and undertake manuring of orchard. After completing of the manuring, irrigation should be provided and mulching with local available organic material. Undertake weeding in large cardamom fields to get better pollination.
 - In New Alluvial Zone and Old Alluvial Zone, complete *boro* rice transplanting within the end of this month.
 - In Laterite and Red Soil Zone, present weather conditions are favourable for attack of Yellow rust in wheat crop, attack of mite and thrips in potato and aphids attack in mustard. For control of yellow rust, spray Mancozeb 75 WP @ 2ml/litre of water at regular intervals. For control of mite and thrips, apply Acephate 75% WP @ 0.75g/litre of water. For aphids, spray Imidachloprid @ 1m/5litre of water.
 - In Hill Zone, due to foggy weather, there is chance of late blight disease in potato crops. For control, 1st spray with Copper Oxychloride 50% WP @ 4g/litre of water and 2nd spray with Mancozeb 75% WP (10 days after 1st spray) @ 2.5g/litre of water.
 - In New Alluvial Zone, due to foggy weather condition, there may be attack of early blight may be severe in potato and black spot may be seen on onion leaf and leaf fall may occur. To control early blight, apply Mancozeb @ 2.5 gm per litre of water and to control black spot, apply Mancozeb @ 2 gm or Zyrum @ 2 gm per litre of water.
 - In Old Alluvial Zone and Terai Zone, due to foggy weather condition, there is chance of attack of *late* blight in potato. To control, spray Dimethomorph + Mancozeb @ 2g/lt water or Cymoxanil + Mancozeb @ 2gm/litre of water.
 - **Andaman and Nicobar Islands:**
 - In North, Middle & South Andaman, undertake intercultural operation weeding and earthing up of the crops like brinjal, bhendi and lobia and apply 25 % of recommended dose of urea.
 - **Odisha:**
 - As cold wave conditions is very likely at isolated places over Odisha, apply light and frequent irrigation /sprinkler irrigation in the evening to protect the crops from frost / cold injury. To protect young fruit plants from chilly winds, cover young fruit plants with straw/polythene sheets/ gunny bags. Apply black plastic sheet

mulching in orchard crops.

- In East and South Eastern Coastal Plain Zone, undertake land preparation and transplanting of rice. The rice seedlings at 4-5 leaf stage are ready for transplanting.
- In Eastern Ghat High Land Zone, continue sowing of pea and lentil under zero tillage in rice field.
- In Western Undulating Zone, continue nursery preparation and sowing pre germinated seeds for rice raising seedlings.
- In Western Undulating Zone, aphid infestation may occur at green gram and black gram crop at pod formation stage. Spray Thiomethaxome @ 0.40/litre of water or Acetamiprid @ 0.2g/litre of water for its control.
- In Western Undulating Zone and North Central Plateau, the past cloudy and humid weather favours attack of Leaf webber and mustard saw fly at pod/seed formation stage of mustard. Spray Triazophos or Profenophos 2ml/litre of water for control.
- In East and South Eastern Coastal Plain Zone, cloudy weather may favour infestation of saw fly in mustard. Undertake spraying of Quinalphos @ 2 ml per litre water to control.
- In Mid Central Table Land Zone, as due to cloudy weather till last week, there is possibility of spread of powdery mildew disease in black gram and green gram. To control, spray Sulfex @ 5g/litre of water.

▪ **Bihar:**

- In South Alluvial Plain Zone, irrigate wheat crop at tillering and Crown Root Initiation stage as per requirement.
- In North East Alluvial Plain Zone, undertake land preparation for planting of spring sugarcane.
- In North West Alluvial Plain Zone, continue transplanting of onion and apply light irrigation in late sown wheat crop which is at CRI stage.
- In North West Alluvial Plain Zone, in the present weather condition there may be attack of aphids and incidence of white rust in mustard. For aphids, undertake spraying of Rogar or Quinalphos @ 2.0 ml/liter of water and for control of white rust spray Chlorothalonil 75 WP @ 1 gm/ litre of water
- In North West Alluvial, South Alluvial Zone and North East Alluvial Plain Zone, present weather is conducive for attack of powdery mildew disease in pea. Apply Karathen @ 1litre/1000 litres of water per ha.
- In North East Alluvial Plain Zone, present weather is conducive for attack of aphids in mustard. If insect population above economic threshold level then spraying of Rogar or Quinalphos @ 2.0 ml\litre of water is recommended.

▪ **Jharkhand:**

- In Western Plateau Zone, undertake sowing of vegetables like sponge gourd, bottle gourd, pumpkin, water melon, musk melon etc.
- In South Eastern Plateau Zone, because of foggy weather during morning and later on clear and sunny weather favours attack of aphids on mustard hence frequent monitoring is necessary. In early stages of attack, farmers are advised to separate and destroy the infected part of the plants.
- In Central, North Eastern Plateau and South Eastern Plateau Zone, due to variation in temperature, spreading of powdery mildew disease is likely to be more prominent in pea. Hence, spraying of Karathen @ 1.5 ml or Sulfex @ 2.5 g per liter of water should be done to prevent it from further spreading.
- In South Eastern Plateau Zone, those areas remain dry with cool and lower temperature, there is chance of attack of various leaf eating and sucking pests on pigeon pea crop, spray Monochrotophos @ 1 ml per liter of water at flowering stage and Indoxacarb @ 0.5 – 1 ml per liter of water at pod formation stage.
- In South Eastern Plateau Zone, because of cool and humid weather, potato crop is seen with the infestation of early and late blight. Undertake spraying of Krilaksil or Ridomil MZ @ 1.5 g per liter of water to check it from further spreading.
- In Western Plateau Zone, the existing weather conditions are favourable for the attack of aphids in different crops like mustard, pea, bean etc. Spray Monocrotophos or Metasystox or Imidaclorpryd @ 1 ml per litre of water to control the aphid.
- Suitable varieties for sowing are given in Annexure III.

• **Animal Husbandry**

- In Sub-Himalayan West Bengal & Bihar, low temperature condition may adversely affect the milk production and performance of domestic animals. Farmers are advised to give protein enriched feed to the animals and do not keep the animal in the open during night hours.
- In Terai Zone of West Bengal, provide artificial heat to new born animal or chick to protect from chill especially at night.
- In Bihar, provide heat by lighting 100W filament bulb @ 1 bulb per 20 newly born chicks and vaccinate the birds as per the recommended age.
- In Coastal Saline Zone of West Bengal, protect poultry birds from cold by using electric bulb (300watt for 100sq feet) to prevent Coryza disease.

CENTRAL INDIA [M.P., CHHATTISGARH]



Cauliflower



Gram



Okra



Wheat

- **Realised Rainfall:** Rainfall occurred in Damoh, Rewa, Satna, Sidhi and Umaria districts of East Madhya Pradesh; Bhopal district of West Madhya Pradesh and Bilaspur district of Chhattisgarh. Weather remained mainly dry over rest of the region.
- **Advisories:**
 - As cold wave condition is very likely at isolated places over Madhya Pradesh and Chhattisgarh on 22nd & 23rd January, apply light and frequent irrigation /sprinkler irrigation in the evening to protect the crops from frost /cold injury. To protect young fruit plants from chilly winds, cover young fruit plants with straw/polythene sheets/gunny bags.
 - **Madhya Pradesh:**
 - In Malwa Plateau Zone, continue nursery preparation of vegetables like tomato, brinjal, chilli etc. Apply irrigation in potato, coriander (flowering), onion and in wheat at tillering stage.
 - In Jhabua Hill Zone, continue harvesting of matured vegetables and undertake digging of matured rhizomes of turmeric and ginger.
 - In Kymore Plateau and Satpura Hill Zone due to humid weather, there are chances of attack of aphids in mustard, apply Imidachloprid @ 100 ml/ha by mixing in 500-600 litre of water.
 - In Vindya Plateau Zone, due to cloudy weather there are chances of attack of fruit and stem borer in vegetables, spray Triazophos 40 EC @ 80 ml per hectare.
 - Due to humid weather, there is attack of Diamond back in cauliflower and cabbage crops in Bundelkhand Zone; spray Malathion 50 E.C. @ 2ml/litre of water for control.
 - **Chhattisgarh:**
 - In North Hill Zone and Bastar Plateau zone of Chhattisgarh, apply irrigation in late sown wheat at CRI stage.
 - Continue sowing of cucurbitaceous crops in polythene bags, sowing of leafy vegetables and land preparation for sowing of summer vegetables and sugarcane in North Hill Zone.
 - In Bastar Plateau Zone, continue intercultural operation in vegetable and flower crops. Apply sprinkler irrigation in pulse crops like chickpea and garden pea etc. at flowering stage. Spray 2% urea after nipping in gram crop for better branching and yield. Undertake field preparation for planting sugarcane.
 - In Chhattisgarh Plain Zone, continue field preparation for sowing of maize and sunflower. Continue preparation of seedlings of cucurbitaceous vegetables in polythene bags.
 - Due to humid weather, white rust is noticed in mustard in Bastar Plateau Zone; for control, spray Mancozeb+ Metalycsil @ 2.5 g/litre of water or any Copper fungicide @ 2.5 g/litre of water.
 - Due to cloudy weather, there is chance of aphid attack in oilseed, pulses and vegetables in Chhattisgarh Plain Zone; continuous monitoring and spraying of neem based pesticides at initial outbreak is advised. If infestation is more apply Methyle Demeton @1.5 ml/acre in 200 litres of water.
 - Suitable varieties are given in Annexure III.
- **Animal Husbandry**
 - In view of the prevailing cold wave conditions in Madhya Pradesh and Chhattisgarh, provide fodder/feed mixed with minerals etc. and fresh water to milch animals. Keep animals in sheds during night time. Hang gunny bags in the cattle and poultry house to prevent cold air coming in. Provide extra lighting in Poultry sheds.

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



Wheat



Sugarcane



Cauliflower



Mustard

- **Realised Rainfall:** Rainfall occurred in Sonbhadra district of East Uttar Pradesh. Weather remained mainly dry/dry over rest of the region.
- **Advisories:**
 - As dense to very dense fog is very likely at isolated places over Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh and north Rajasthan on 22nd and 23rd January, there is chance of incidence of early blight disease in potato, tomato and onion crops and other standing crops for incidence of pest and diseases. Monitor the crops and if symptoms are noticed, undertake plant protection measures.
 - **Jammu & Kashmir:**
 - In Sub Tropical Zone, complete nursery sowing of tomato in polybags under protected conditions. As dry weather is prevailing, apply irrigation in wheat crop at tillering and jointing stage.
 - In Valley Temperate Zone, undertake mulching in Knol-khol, cabbage & root crops. In view of the frost conditions. Maintain drainage channels in the fields.
 - In Sub Tropical Zone, due to the prevailing above normal maximum temperature, there is chance of yellow rust in wheat crops. Monitor the crops and if attack is observed, apply Propiconazole (Tilt) @ 0.1%. Also monitor *rabi* pulses for wilt and blight disease, if observed, apply Bavistin/Carbendazim @ 3gm/litre of water.
 - In Intermediate Zone, due to humid weather, there may be incidence of aphids in mustard and gobi sarson. If 8–10 aphid population is noticed per plant spray Rogor (Dimethoate) 30 EC @ 1 ml/litre of water at fifteen days interval.
 - **Uttarakhand:**
 - In Hill Zone, continue hoeing and weeding operation in irrigated wheat. Apply light and frequent irrigation/sprinkler irrigation in garlic and onion and undertake mulching in potato and cabbage crops. Undertake transplanting of cabbage and round radish for seed production.
 - In Sub humid Sub tropic Zone, apply light and frequent irrigation to protect the wheat crops against frost.
 - In Hill Zone, in the present weather, there may be incidence of leaf eating caterpillar in cole crops, to control apply Sipnosad @ 1ml per 3 litre of water. Due to cool and humid weather there is a chance of infestation of blight in potato, spray Diethane M-45 @20 -25 g in 10 litres of water; repeat after 10-12 days. Also there is a chance of infestation of mahu pest in toria at maturity stage and mahu/ thrips in garlic and onion, spray Metacystacus/ Roger @2ml per liter of water in toria and spray Imidacloprid @6-8 ml in 10 litres of water in garlic and onion.
 - In Sub humid Sub tropic Zone, due to cool and humid weather there is a chance of infestation of blight in potato and of mildew in pea, undertake compatible protection measures to control both.
 - **Himachal Pradesh:**
 - In Sub-Montane and Low Hills Sub-Tropical Zone, continue transplanting of onion and complete planting of potato. Complete training, skiffing and cleaning work in tea and apply irrigation in nursery of tea plants. Continue measures to protect vegetable crops from frost.
 - In Mid Hills sub-Humid Zone, continue harvesting of ginger. Continue transplanting of onion.
 - In Sub-Montane and Low Hills Sub-Tropical Zone, under prevailing weather conditions, there are chances of attack of downy mildew in cruciferous vegetables, spray Redomil M-Z @ 25 g per litre of water at 15 days interval.
 - In High Hill Temperate Dry zone, maintain desired temperature inside poly houses of seedlings of Chinese cabbage, spinach and coriander.
 - In Sub-Montane and Low Hills Sub-Tropical Zone, due to prevailing temperature condition, there may be chances of attack of yellow rust and aphids in wheat crop. For control of yellow rust, spray Tilt @ 1ml per litre of water and spray Cypermethrin 10 EC @ 30 ml per 30 litre of water per kanal area for aphids
 - **Rajasthan:**
 - Apply irrigation in maize with top dressing of nitrogen at knee high stage in Southern Humid Plain Zone.
 - Continue harvesting of matured kinnow fruits and continue measures to protect kinnow trees from cold. Continue harvesting of sugarcane and stop irrigation before 15 days of cutting in Irrigated North western Plain Zone.
 - In Flood Prone Eastern Plain Zone, weather is conducive for white rust and alternaria blight in mustard crop, spray Mancozeb or Ridomil MZ 72 WP @ 2.0 Kg in 800 litre water/ha for white rust and spray Iprodione or Mencozeb @ 2 Kg/800 litre solution for alternaria blight.
 - In Semi Arid Eastern Plain Zone, there is a chance of attack of aphids on mustard and barley, dust Methyl parathion 2% @ 25 kg /ha; to control pod borer in pea, spray Malathion 50 EC @ 1.0 ml per litre of water, harvesting should be done 3 days after spray.
 - In Arid Western plain zone, due to humid weather, there is a chance of alternaria blight in cumin, white rust in mustard and leaf blight in wheat and barley, apply Ridomil MZ @ 2 g/litre or Trichdarma diffused @ 5ml/litre to control white rust and spray Mancozeb @ 2-3g/litre along with water for blight in cumin and leaf blight in wheat and barley.
 - In Irrigated North western Plain Zone and in Sub Humid Southern Plain, Aravali Hill Zone, due to prevailing weather, there is a chance of attack of pod borer in gram, apply Quinalphos @ 1.5 per cent dust 24 kg/ha or Monocrotophos 36 SL @ 1 litre of water per hectare.

- In Southern Humid Plain Zone, due to prevailing weather there is a chance of attack of pod borer in gram, stem borer in maize, aphids in mustard, spray Acephate 75 SP@ 650 g/ha in gram before flowering for control of pod borer; whorl application of Phorate 10 G for stem borer; apply Chlorpyrifos 20 EC @ 600 ml/ha for aphids.
- In Arid Western plain zone, due to prevailing weather, there is a chances of attack of aphids and other sucking pests in rabi crops and in mustard. For control, sucking pests, spray Thiomethoxam (25 WG) @ 100 gm or Dimethoate 30 EC @ 1200 ml per hectare.
- **Punjab, Haryana and Delhi:**
- In Western Zone of Punjab, in view of the prevailing low minimum temperature, it is advised to provide polythene sheet/sarkanda/kahi rice straw mulching in the fields of tomato seedlings to protect plants from cold/frost injury. Dwarf varieties can be saved from frost injury with 100 gauze thick white plastic bags of 35 X 25 cm size.
- In Undulating Plain Zone of Punjab, protect newly planted fruit plants from decreasing night temperature for their proper growth and cover the nursery/young fruit plants with rice straw, thatches, plastic sheet etc. Undertake intercultural operations in vegetable crops and complete the sowing of onion in this month. Undertake planting of peach, plum and ber plants.
- In Central Plain Zone of Punjab, apply irrigation in sugarcane.
- In Western Zone of Haryana, apply light irrigation in mustard and apply light irrigation in wheat crop as per requirement. Apply light irrigation to vegetable and young fruit plants in the evening to protect from cold/ frost injury.
- In Eastern Zone of Haryana, apply first irrigation to wheat crop at CRI stage, which are about 21-25 days old, as per requirement.
- In Western Semi-Arid Zone of Delhi, continue transplanting of *rabi* onion, tomato, cabbage, broccoli and early cauliflower on raised bed, sowing of garlic in raised bed. Apply irrigation to late sown wheat crop, which are about 21-25 days old.
- In Western Zone, Central and Undulating Plain Zone of Punjab, due to foggy weather condition, there may be chances of attack of late blight in potato crop and in Central and Undulating Plain Zone of Punjab rust in pea may appear for control, spray Indofil-M-45 @ 500 gm per acre at weekly interval.
- In Central and Undulating Plain Zone of Punjab, there is chance of for occurrence of yellow rust in wheat fields in the present weather condition. Monitor the crop and spray with Tilt/ Shine/ Bumper/ Compass/ Markzole @ 200 ml in 200 litres of water/acre if symptoms are noticed.
- In Western, Central and Undulating Plain Zone of Punjab, there may be chances of aphids in mustard crop; to control spray 40g Actara 25 WG or 400 ml Rogor 30EC in 80-125 lit of water per acre.
- In Central Plain Zone of Punjab, due to humid weather condition, there may be chances of attack of pink stem borer in wheat, for control, spray Quinalphos 25 EC @ 800 ml in 100 litres of water per acre.
- Due to high humidity in Western Zone of Haryana, infection of early blight may occur in potato and tomato. Monitor the crops. Due to high moisture level or foggy weather, alternaria blight/powdery mildew in mustard crop may be observed, spray Mancozeb/Indophil M 45 600 gram in 300 liters of water per acre.
- **Uttar Pradesh:**
- In Central Pain Zone, continue transplanting of onion and nursery sowing of chilli (variety- Pant C-1, Jwala and Sadabahar etc), undertake sowing of bhindi and cucurbits.
- In Eastern Plain Zone, continue land preparation for planting of autumn sugarcane.
- In Western Plain Zone, continue planting of autumn sugarcane and undertake sowing of sunflower.
- In Bundelkhand Zone, continue planting of garlic and transplanting of onion, cabbage, cauliflower, tomato, brinjal and chilli.
- In North Eastern Plain Zone, continue sowing of rabi maize, linseed and lentil.
- In Central Plain Zone, due to prevailing weather condition, there may be chances of attack of late blight in potato crop, spray Indofil-M-45/Kavach /Antracol @ 500-700 g per acre or Blitox @ 750-1000 g per acre in 250-350 litres of water per acre at weekly interval 2-3 times.
- In Central Plain Zone, due to prevailing weather condition, there may be chances of attack of powdery mildew in pea, for control, spray Tridemorph 80 % EC @ 500 ml in 500 to 600 litre of water per hectare.
- In Central Plain Zone, due to prevailing weather condition, there may be chances of attack of mosaic leaf curl in brinjal, chilli and tomato for control spray Mithyle-O-Dimetan 25 E.C. @ 2 litre per 700 to 800 litres of water per hectare.
- Suitable varieties are given in Annexure III.
- **Horticulture**
- Continue preparation of tree basins for apple in High Hill Temperate Dry zone, for apple, stone fruits and pomegranate in Mild Hills Sub Humid Zone of Himachal Pradesh, for apple and stone fruits in Mid Hills sub-Humid Zone.
- In Mid Hills sub-Humid Zone of Himachal Pradesh, continue mulching of tree basins to protect from frost. Continue planting of new varieties of apple, pear, stone fruits, walnut, pecanut and grapes.
- In Sub-Montane and Low Hills Sub-Tropical Zone of Himachal Pradesh, weather condition is also conducive

- for cleaning and preparation of basins in the orchards.
- In Intermediate zone of Jammu and Kashmir, protect young plants of mango, litchi, papaya, guava, citrus etc from frost by covering them with suitable thatching material. Complete pruning of fruit trees before February.
- **Floriculture**
- In Sub Montane and Low Hills Sub Humid Zone of Himachal Pradesh, continue interculture in the winter flowers. As there is a chance of attack of aphids, spray Malathion @0.05% for the control.
- **Animal Husbandry**
- In High Hill Temperate Dry Zone and in Sub-Montane and Low Hills Sub-Tropical Zone of Himachal Pradesh, give daily 40-50g Minerals mixture per cow and protect animals from cold.
- In Valley temperate zone and in Intermediate Zone of Kashmir, protect the animals from low temperatures by covering the windows and doors of animal sheds with gunny bags particularly during night hours to avoid stress to the animals.
- In Bundelkhand Zone of Uttar Pradesh, protect animals from low night temperature during night time.

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

Week by week Rainfall Distribution

| Sub-Divisions | 06.01.16 | | 13.01.16 | | 20.01.16 | |
|----------------------------|-------------|--------|-------------|--------|-------------|--------|
| | Actual (mm) | % dep. | Actual (mm) | % dep. | Actual (mm) | % dep. |
| Arunachal Pradesh | | | | | | |
| Anjaw | ** | ** | ** | ** | ** | ** |
| Changlang | 0.0 | -100 | 2.5 | -83 | 10.5 | -17 |
| Dibang Valley | ** | ** | 38.0 | 233.0 | 6.0 | -64.0 |
| East Kameng | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| East Siang | 0.0 | -100 | 11.7 | 113 | 2.3 | -65 |
| Kurung Kumey | ** | ** | ** | ** | ** | ** |
| Lohit | 0.0 | -100 | 14.6 | 77 | 0.4 | -96 |
| Lower Dibang Valley | 0.0 | -100 | 32.6 | 186 | 3.7 | -78 |
| Lower Subansari | ** | ** | ** | ** | ** | ** |
| Papumpare | 0.0 | -100 | 28.1 | 126 | 10.9 | 47 |
| Tawang | 0.0 | -100 | 9.0 | 2 | 7.0 | -18 |
| Tirap | 0.0 | -100 | 11.2 | 23 | 1.0 | -92 |
| Upper Siang | 0.0 | -100 | 39.8 | 310 | 9.2 | -32 |
| Upper Subansari | 0.0 | -100 | 1.6 | -63 | 5.8 | -36 |
| West Kameng | 0.0 | -100 | 4.2 | -52 | 0.0 | -100 |
| West Siang | ** | ** | 14.0 | 192.0 | 9.0 | 76 |
| Assam&Meghalaya | | | | | | |
| Assam | | | | | | |
| Baksa | 0.0 | -100 | 44.5 | 2518 | 4.2 | -3 |
| Barpeta | 0.0 | -100 | 4.4 | 156 | 3.3 | -24 |
| Bongaigaon | 0.0 | -100 | 0.0 | -100 | 1.2 | -76 |
| Cachar | 0.0 | -100 | 3.0 | -32 | 0.1 | -97 |
| Chirang | 0.0 | -100 | 22.6 | 4420 | 0.6 | -88 |
| Darrang | ** | ** | ** | ** | ** | ** |
| Dhemaji | 0.0 | -100 | 12.0 | 88 | ** | ** |
| Dhubri | 0.0 | -100 | 0.0 | -100 | 5.6 | 107 |
| Dibrugarh | 0.0 | -100 | 9.5 | 47 | 5.2 | 41 |
| Goalpara | 0.0 | -100 | 0.0 | -100 | 1.7 | -60 |

| | | | | | | |
|------------------|-----|------|------|------|------|------|
| Golghat | 0.0 | -100 | 17.4 | 255 | 0.0 | -100 |
| Hailakandi | 0.0 | -100 | 8.7 | 1630 | 4.0 | -58 |
| Jorhat | 0.0 | -100 | 24.8 | 464 | 1.2 | -80 |
| Kamrup(Rural) | 0.0 | -100 | 0.2 | -95 | 1.1 | -56 |
| Kamrup(Metro) | 0.0 | -100 | 0.0 | -100 | 5.4 | 116 |
| Karbi Anglong | 0.0 | -100 | 5.8 | 15 | 0.0 | -100 |
| Karimganj | 0.0 | -100 | 8.8 | 86 | 0.0 | -100 |
| Kokrajhar | 0.0 | -100 | 3.0 | -19 | 4.4 | 9 |
| Lakhimpur | 0.0 | -100 | 17.2 | 169 | 4.7 | -21 |
| Morigaon | 0.0 | -100 | 1.6 | -68 | 0.0 | -100 |
| N.C.Hills | 0.0 | -100 | 4.2 | 0 | 0.0 | -100 |
| Nowgong | 0.0 | -100 | 4.9 | 37 | 1.5 | -61 |
| Nalbari | 0.0 | -100 | 43.0 | 1003 | 3.7 | 106 |
| Sonitpur | 0.0 | -100 | 20.5 | 413 | 7.9 | -13 |
| Sibsagar | 0.0 | -100 | 11.6 | 107 | 2.9 | -12 |
| Tinsukia | 0.0 | -100 | 7.6 | 36 | 0.8 | -89 |
| Udalgiri | 0.0 | -100 | 21.1 | 559 | 15.4 | 450 |
| Meghalaya | | | | | | |
| East Garo Hills | 0.0 | -100 | 0.0 | -100 | 16.0 | 1131 |
| East Khasi Hills | 0.0 | -100 | 0.6 | -91 | 3.7 | 40 |
| Jaintia Hills | 0.0 | -100 | 0.0 | -100 | 4.0 | -58 |
| Ribhoi | 0.0 | -100 | 1.7 | -76 | 3.5 | 40 |
| South Garo Hills | ** | ** | 0.0 | -100 | 6.0 | 94 |
| West Garo Hills | 0.0 | -100 | 0.0 | -100 | 6.4 | 106 |
| West Khasi Hills | 0.0 | -100 | 0.0 | -100 | 6.0 | 25 |
| NMMT | | | | | | |
| Mizoram | | | | | | |
| Aizwal | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Champhai | ** | ** | ** | ** | ** | ** |
| Kolasib | ** | ** | ** | ** | ** | ** |
| Lawngtlai | ** | ** | ** | ** | ** | ** |
| Lunglei | ** | ** | ** | ** | ** | ** |
| Mamit | ** | ** | ** | ** | ** | ** |
| Saiha | ** | ** | ** | ** | ** | ** |
| Serchhip | ** | ** | ** | ** | ** | ** |
| Manipur | | | | | | |
| Bishnupur | ** | ** | ** | ** | ** | ** |
| Chandel | ** | ** | ** | ** | ** | ** |
| Churachandpur | ** | ** | ** | ** | ** | ** |
| Imphal east | 0.0 | -100 | 6.5 | 33 | 0.0 | -100 |
| Imphal west | 0.0 | -100 | 0.3 | -97 | 0.0 | -100 |
| Senapati | ** | ** | ** | ** | ** | ** |
| Tamenglong | ** | ** | ** | ** | ** | ** |
| Thoubal | ** | ** | ** | ** | ** | ** |
| Ukhrul | ** | ** | ** | ** | ** | ** |
| Nagaland | | | | | | |
| Dimapur | 0.0 | -100 | 10.6 | 21 | 0.0 | -100 |
| Kephire | ** | ** | ** | ** | ** | ** |
| Kohima | 0.0 | -100 | 6.8 | 134 | 1.2 | -37 |

| | | | | | | |
|--------------------------|------|------|------|------|-----|------|
| Longleng | ** | ** | ** | ** | ** | ** |
| Mokokchung | 0.0 | -100 | 4.0 | -43 | 0.0 | -100 |
| Mon | ** | ** | ** | ** | ** | ** |
| Paren | ** | ** | ** | ** | ** | ** |
| Phek | ** | ** | ** | ** | ** | ** |
| Tuensang | ** | ** | ** | ** | ** | ** |
| Wokha | 0.0 | -100 | 6.0 | 3 | 1.0 | -70 |
| Zunheboto | ** | ** | ** | ** | ** | ** |
| Tripura | | | | | | |
| Dhalai | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| NorthTripura | 0.0 | -100 | 0.9 | -75 | 0.6 | -54 |
| SouthTripura | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| West Tripura | 0.0 | -100 | 2.2 | -34 | 0.0 | -100 |
| Himachal Pradesh | | | | | | |
| Bilaspur | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Chamba | 10.1 | -40 | 3.4 | -88 | 0.0 | -100 |
| Hamirpur | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Kangra | 0.0 | -100 | 0.9 | -95 | 0.0 | -100 |
| Kinnaur | 3.1 | -83 | 2.0 | -92 | 1.5 | -92 |
| Kullu | 2.7 | -81 | 8.1 | -53 | 0.0 | -100 |
| Lahaul and Spiti | 18.0 | -9 | 2.2 | -93 | 0.0 | -100 |
| Mandi | 0.0 | -99 | 1.1 | -92 | 0.3 | -98 |
| Shimla | 1.3 | -88 | 3.2 | -77 | 0.2 | -98 |
| Sirmaur | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Solan | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Una | 0.0 | -100 | 95.0 | -95 | 0.0 | -100 |
| Punjab | | | | | | |
| Amritsar | 0.0 | -100 | 6.9 | 1 | 0.0 | -100 |
| Barnala | 0.0 | -100 | 2.0 | -9 | 0.0 | -100 |
| Bhatinda | 0.0 | -100 | 0.7 | -72 | 0.0 | -100 |
| Faridkot | 0.0 | -100 | 0.5 | -77 | 0.0 | -100 |
| Fatehgarh Saheb | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Ferozpur | 0.0 | -100 | 0.4 | -87 | 0.0 | -100 |
| Gurdaspur | 0.5 | -92 | 0.9 | -93 | 0.0 | -100 |
| Hoshiarpur | 0.0 | -100 | 6.5 | -32 | 0.0 | -100 |
| Jalandhar | 0.0 | -100 | 6.3 | 1 | 0.0 | -100 |
| Kapurthala | 0.0 | -100 | 4.0 | -23 | 0.0 | -100 |
| Ludhiana | 0.0 | -100 | 15.5 | 204 | 0.0 | -100 |
| Mansa | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Moga | 0.0 | -100 | 2.8 | -47 | 0.5 | -87 |
| Muktesar | 0.0 | -100 | 5.0 | 213 | 0.0 | -100 |
| Nawashahar | 0.0 | -100 | 15.4 | 93 | 0.3 | -95 |
| Patiala | 0.0 | -100 | 0.4 | -90 | 0.0 | -100 |
| Ropar | 0.0 | -100 | 3.5 | -58 | 0.0 | -100 |
| Sangrur | 0.0 | -100 | 0.3 | -93 | 0.0 | -100 |
| Mohali | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| TarnTaran | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Haryana,Chd,Delhi | | | | | | |
| Haryana | | | | | | |

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|----------------------------|------|------|------|------|-----|------|
| Ambala | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Bhiwani | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Chandigarh | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Faridabad | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Fatehabad | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Gurgaon | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Hissar | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Jhajar | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Jind | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Katihah | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Karnal | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Kurukshetra | 0.0 | -100 | 0.3 | -96 | 0.0 | -100 |
| Mahendragarh | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Mewat | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Palwal | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Panchkkula | 0.0 | -100 | 0.2 | -96 | 0.2 | -98 |
| Panipat | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Rewari | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Rohtak | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Sirsa | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Sonepat | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Yamunanagar | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Delhi | | | | | | |
| Central Delhi | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| East Delhi | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| New Delhi | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| North Delhi | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| North East Delhi | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| North West Delhi | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| South Delhi | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| South West Delhi | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| West Delhi | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Jammu & Kashmir | | | | | | |
| Anantnag | 15.0 | 11 | 7.3 | -49 | 0.0 | -100 |
| Badgam | 16.1 | 222 | 3.6 | -55 | 0.0 | -100 |
| Bandipore | ** | ** | ** | ** | ** | ** |
| Baramula | 39.5 | 148 | 5.5 | -76 | 0.0 | -100 |
| Doda | 8.0 | -70 | 6.8 | -75 | 0.0 | -100 |
| Ganderbal | 16.2 | 84 | 12.8 | 28 | 0.0 | -100 |
| Jammu | 0.4 | -96 | 0.1 | -99 | 0.0 | -100 |
| Kargil | ** | ** | ** | ** | ** | ** |
| Kathua | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Kistwar | ** | ** | ** | ** | ** | ** |
| Kulgam | 11.6 | -14 | 3.2 | -78 | 0.0 | -100 |
| Kupwara | 42.2 | 151 | 14.1 | 12 | 0.0 | -100 |
| Ladakh(Leh) | 0.5 | -71 | 0.0 | -100 | 0.1 | -95 |
| Poonch | ** | ** | ** | ** | ** | ** |
| Pulwama | 5.8 | -1 | 1.9 | -77 | 0.0 | -100 |
| Rajouri | 1.8 | -89 | 1.2 | -94 | 0.0 | -100 |

| | | | | | | |
|----------------------------|------|------|-----|------|------|------|
| Ramban | 9.5 | -64 | 4.3 | -84 | 0.0 | -100 |
| Reasi | 1.4 | -94 | 1.1 | -95 | 0.0 | -100 |
| Samba | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Shopian | ** | ** | ** | ** | ** | ** |
| Srinagar | 14.7 | 67 | 3.9 | -61 | 0.0 | -100 |
| Udhampur | 0.6 | -98 | 2.0 | -90 | 0.0 | -100 |
| East Madhya Pradesh | | | | | | |
| Anuppur | 0.0 | -100 | 0.0 | -100 | 8.5 | 30 |
| Balaghat | 0.0 | -100 | 0.0 | -100 | 4.8 | 10 |
| Chhatarpur | 0.0 | -100 | 0.0 | -100 | 19.7 | 368 |
| Chindwara | 0.0 | -100 | 0.0 | -100 | 17.7 | 489 |
| Damoh | 0.0 | -100 | 0.0 | -100 | 36.5 | 508 |
| Dindori | 0.0 | -100 | 0.0 | -100 | 19.6 | 390 |
| Jabalpur | 0.0 | -100 | 0.0 | -100 | 14.8 | 347 |
| Katni | 0.0 | -100 | 0.0 | -100 | 14.0 | 278 |
| Mandla | 0.0 | -100 | 0.0 | -100 | 19.6 | 184 |
| Narsingpur | 0.0 | -100 | 0.0 | -100 | 3.0 | 7 |
| Panna | 0.0 | -100 | 0.0 | -100 | 15.1 | 110 |
| Rewa | 0.0 | -100 | 0.0 | -100 | 21.4 | 364 |
| Sagar | 0.0 | -100 | 0.0 | -100 | 19.5 | 316 |
| Satna | 0.0 | -100 | 0.0 | -100 | 37.4 | 513 |
| Seoni | 0.0 | -100 | 0.0 | -100 | 13.3 | 410 |
| Shahdol | 0.0 | -100 | 0.0 | -100 | 14.2 | 168 |
| Sidhi | 0.0 | -100 | 0.0 | -100 | 33.2 | 564 |
| Singrauli | 0.0 | -100 | 0.0 | -100 | 2.5 | -14 |
| Tikamgarh | 0.0 | -100 | 0.0 | -100 | 7.5 | 12 |
| Umaria | 0.0 | -100 | 0.0 | -100 | 44.4 | 788 |
| West Madhya Pradesh | | | | | | |
| Agar | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Alirajpur | 0.0 | -100 | 0.0 | -100 | 2.6 | 333 |
| Asoknagar | 0.0 | -100 | 0.0 | -100 | 10.8 | 412 |
| Badwani | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Betul | 0.0 | -100 | 0.0 | -100 | 3.5 | 94 |
| Bhind | 0.0 | -100 | 0.0 | -100 | 5.9 | 83 |
| Bhopal | 0.0 | -100 | 0.0 | -100 | 21.0 | 577 |
| Burhanpur | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Datia | 0.0 | -100 | 0.9 | -69 | 6.1 | 203 |
| Dewas | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Dhar | 0.0 | -100 | 0.0 | -100 | 3.9 | 382 |
| Guna | 0.0 | -100 | 0.5 | -82 | 8.8 | 150 |
| Gwalior | 0.0 | -100 | 0.0 | -100 | 7.2 | 57 |
| Harda | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Hosangabad | 0.0 | -100 | 0.0 | -100 | 8.6 | 207 |
| Indore | 0.0 | -100 | 0.0 | -100 | 0.4 | -73 |
| Jhabua | 0.0 | -100 | 0.0 | -100 | 0.9 | 367 |
| Khandwa | 0.0 | -100 | 0.0 | -100 | 0.7 | -67 |
| Khargone | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Mandsaur | 0.0 | -100 | 0.0 | -100 | 0.8 | -11 |

| | | | | | | |
|---------------------------|-----|------|-----|------|------|-------|
| Morena | 0.0 | -100 | 0.0 | -100 | 0.1 | -97 |
| Neemuch | 0.0 | -100 | 0.0 | -100 | 1.8 | 775 |
| Raisen | 0.0 | -100 | 0.1 | -96 | 10.6 | 343 |
| Rajgarh | 0.0 | -100 | 0.0 | -100 | 10.9 | 418 |
| Ratlam | 0.0 | -100 | 0.0 | -100 | 0.0 | -67 |
| Sehore | 0.0 | -100 | 0.0 | -100 | 3.6 | 57 |
| Shajapur | 0.0 | -100 | 0.0 | -100 | 11.7 | 457 |
| Sheopur Kalani | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Shivpuri | 0.0 | -100 | 0.0 | -100 | 3.6 | -21 |
| Ujjain | 0.0 | -100 | 0.0 | -100 | 9.8 | 600 |
| Vidisha | 0.0 | -100 | 0.1 | -91 | 13.6 | 313 |
| Chhattisgarh | | | | | | |
| Bastar | 0.0 | -100 | 0.0 | -100 | 0.6 | -57 |
| Bijapur | 0.0 | -100 | 0.0 | -100 | 10.2 | 10100 |
| Bilaspur | 0.0 | -100 | 0.0 | -100 | 21.2 | 684 |
| Dantewara | 0.0 | -100 | 0.0 | -100 | 0.1 | -89 |
| Dhamtari | 0.0 | -100 | 0.0 | -100 | 3.8 | 533 |
| Durg | 0.0 | -100 | 0.0 | -100 | 10.8 | 984 |
| Janjgir | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Jashpurnagar | 0.0 | -100 | 0.0 | -100 | 5.2 | 53 |
| Kanker | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Korba | 0.0 | -100 | 0.0 | -100 | 11.8 | 594 |
| Koriya | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Kawardha | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Mahasumund | 0.0 | -100 | 0.0 | -100 | 15.0 | 971 |
| Narayanpur | 0.0 | -100 | 0.0 | -100 | 0.4 | -73 |
| Raigarh | 0.0 | -100 | 0.0 | -100 | 4.0 | 38 |
| Raipur | 0.0 | -100 | 0.0 | -100 | 5.5 | 358 |
| Rajandgaon | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Surguja | 0.0 | -100 | 0.0 | -100 | 7.5 | 149 |
| East Uttar Pradesh | | | | | | |
| Allahabad | 0.0 | -100 | 0.0 | -100 | 9.5 | 138 |
| Ambedkar Nagar | 0.0 | -100 | 0.0 | -100 | 8.0 | 129 |
| Azamgarh | 0.0 | -100 | 0.0 | -100 | 7.2 | 167 |
| Bahraich | 0.0 | -100 | 0.0 | -100 | 1.2 | -64 |
| Ballia | 0.0 | -100 | 0.0 | -100 | 3.5 | 136 |
| Balrampur | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Banda | 0.0 | -100 | 0.3 | -93 | 11.1 | 178 |
| Barabanki | 0.0 | -100 | 0.0 | -100 | 5.0 | 18 |
| Basti | 0.0 | -100 | 0.0 | -100 | 3.7 | 12 |
| Chandauli | 0.0 | -100 | 0.0 | -100 | 3.0 | -19 |
| Deoria | 0.0 | -100 | 0.0 | -100 | 1.0 | -60 |
| Faizabad | 0.0 | -100 | 0.0 | -100 | 1.6 | -57 |
| Farrukhabad | 0.0 | -100 | 0.0 | -100 | 0.9 | -67 |
| Fatehpur | 0.0 | -100 | 0.0 | -100 | 2.1 | -53 |
| Gazipur | 0.0 | -100 | 0.0 | -100 | 2.0 | -5 |
| Gonda | 0.0 | -100 | 0.0 | -100 | 7.5 | 134 |
| Gorakhpur | 0.0 | -100 | 0.0 | -100 | 3.2 | -29 |
| Hardoi | 0.0 | -100 | 0.0 | -100 | 5.2 | 63 |

| | | | | | | |
|---------------------------|-----|------|-----|------|------|------|
| Jaunpur | 0.0 | -100 | 0.0 | -100 | 1.9 | -49 |
| Kannauj | 0.0 | -100 | 0.0 | -100 | 4.0 | 60 |
| Kanpur City | 0.0 | -100 | 0.0 | -100 | 7.5 | 59 |
| Kanpur Dehat | 0.0 | -100 | 0.0 | -100 | 5.0 | 25 |
| Kaushambi | 0.0 | -100 | 0.0 | -100 | 5.5 | 42 |
| Kheri | 0.0 | -100 | 0.0 | -100 | 0.3 | -93 |
| Kushi nagar | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Lucknow | 0.0 | -100 | 0.0 | -100 | 6.7 | 63 |
| 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 | 10.5 | 156 |
| Pratapgarh | 0.0 | -100 | 0.0 | -100 | 7.7 | 132 |
| RaiBareilly | 0.0 | -100 | 0.0 | -100 | 1.5 | -50 |
| Sahuji Maharajnagar | 0.0 | -100 | 0.0 | -100 | 9.5 | 111 |
| Sant Kabirnagar | 0.0 | -100 | 0.0 | -100 | 7.0 | 192 |
| Sant Ravidas Nagar | 0.0 | -100 | 0.0 | -100 | 11.0 | 197 |
| Shrawasti | ** | ** | ** | ** | ** | ** |
| Sidharthnagar | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Sitapur | 0.0 | -100 | 0.0 | -100 | 1.5 | -57 |
| Sonbhadra | 0.0 | -100 | 0.0 | -100 | 21.1 | 471 |
| Sultanpur | 0.0 | -100 | 0.0 | -100 | 1.5 | -57 |
| Unnao | 0.0 | -100 | 0.0 | -100 | 9.5 | 164 |
| Varanasi | 0.0 | -100 | 0.0 | -100 | 7.0 | 71 |
| West Uttar Pradesh | | | | | | |
| Agra | 0.0 | -100 | 0.0 | -100 | 0.3 | -88 |
| Aligarh | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Auraiya | 0.0 | -100 | 0.0 | -100 | 5.0 | 16 |
| Badaun | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Baghpat | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Bareilly | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Bijnor | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Bulandsahar | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Etah | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Etawah | 0.0 | -100 | 0.0 | -100 | 4.5 | 32 |
| Firozabad | 0.0 | -100 | 0.0 | -100 | 1.4 | -55 |
| GBNagar | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Ghaziabad | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Hamirpur | 0.0 | -100 | 0.0 | -100 | 5.3 | 67 |
| Jalaun | 0.0 | -100 | 0.0 | -100 | 5.7 | 21 |
| Jhansi | 0.0 | -100 | 0.0 | -100 | 3.9 | -7 |
| Jotiba Phule Nagar | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Kanshiramnagar | 0.0 | -100 | 0.0 | -100 | 1.0 | -78 |
| Lalitpur | 0.0 | -100 | 0.0 | -100 | 14.0 | 155 |
| Mahamaya Nagar | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Mahoba | 0.0 | -100 | 0.0 | -100 | 5.6 | 19 |
| Mainpuri | 0.0 | -100 | 0.0 | -100 | 1.6 | -47 |
| Mathura | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Meerut | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |

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|--------------------|-----|------|-----|------|------|------|
| Moradabad | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Muzaffarnagar | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| 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 | 0.8 | -73 |
| Uttarakhand | | | | | | |
| Almora | 0.0 | -100 | 0.0 | -100 | 3.8 | 38 |
| Bageshwar | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Chamoli | 0.0 | -100 | 3.6 | -58 | 2.3 | -81 |
| Champawat | 0.0 | -100 | 0.0 | -100 | 2.5 | -58 |
| Dehradun | 0.0 | -100 | 0.5 | -95 | 0.0 | -100 |
| Garhwal Pauri | 0.0 | -100 | 0.0 | -100 | 0.1 | -99 |
| Garhwal Tehri | 0.0 | -100 | 0.2 | -98 | 0.3 | -96 |
| Haridwar | 0.0 | -100 | 0.0 | -100 | 2.2 | -64 |
| Nainital | 0.0 | -100 | 0.0 | -100 | 0.6 | -91 |
| Pithorgarh | 0.0 | -100 | 3.0 | -68 | 5.7 | -28 |
| Rudraprayag | 0.0 | -100 | 2.5 | -86 | 0.3 | -97 |
| Udham Sing Nagar | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Uttarkashi | 0.0 | -100 | 1.9 | -89 | 0.0 | -100 |
| Bihar | | | | | | |
| Araria | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Arwal | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Aurangabad | 0.0 | -100 | 0.0 | -100 | 15.7 | 257 |
| Banka | 0.0 | -100 | 0.0 | -100 | 18.3 | 554 |
| Begusarai | 0.0 | -100 | 0.0 | -100 | 5.2 | 160 |
| Bhabua | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Bhagalpur | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Bhojpur | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Buxar | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Darbhanga | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| East Champaran | 0.0 | -100 | 0.0 | -100 | 2.2 | -35 |
| Gaya | 0.0 | -100 | 0.0 | -100 | 23.1 | 507 |
| Gopalganj | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Jahanabad | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Jamui | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Katihar | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Khagadia | 0.0 | -100 | 0.0 | -100 | 5.7 | 256 |
| Kishanganj | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Lakhisarai | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Madhepura | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Madhubani | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Monghyar | 0.0 | -100 | 0.0 | -100 | 4.6 | 12 |
| Muzaffarpur | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Nalanda | 0.0 | -100 | 0.0 | -100 | 9.3 | 116 |
| Nawada | 0.0 | -100 | 0.0 | -100 | 29.5 | 677 |
| Patna | 0.0 | -100 | 0.0 | -100 | 1.9 | -50 |
| Purnea | 0.0 | -100 | 0.0 | -100 | 6.0 | 88 |
| Rohtas | 0.0 | -100 | 0.0 | -100 | 19.0 | 604 |

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|-----------------------|-----|------|-----|------|------|------|
| Saharsha | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Samstipur | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Saran | 0.0 | -100 | 0.0 | -100 | 11.0 | 156 |
| Sheikpura | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Sheohar | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Sitamarhi | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Siwan | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Supaul | 0.0 | -100 | 0.0 | -100 | 2.6 | 30 |
| Vaishali | 0.0 | -100 | 0.0 | -100 | 14.8 | 300 |
| West Champaran | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Jharkhand | | | | | | |
| Bokaro | 0.0 | -100 | 0.0 | -100 | 5.7 | 55 |
| Chatra | 0.0 | -100 | 0.0 | -100 | 14.0 | 211 |
| Deoghar | 0.0 | -100 | 0.0 | -100 | 12.4 | 125 |
| Dhanbad | 0.0 | -100 | 0.0 | -100 | 1.9 | -48 |
| Dumka | 0.0 | -100 | 0.0 | -100 | 12.3 | 374 |
| East Singbhum | 0.0 | -100 | 0.0 | -100 | 18.4 | 609 |
| Garhwa | 0.0 | -100 | 0.0 | -100 | 55.0 | 1096 |
| Giridih | 0.0 | -100 | 0.0 | -100 | 11.1 | 457 |
| Godda | 0.0 | -100 | 0.0 | -100 | 9.1 | 132 |
| Gumla | 0.0 | -100 | ** | ** | ** | ** |
| Hazaribagh | 0.0 | -100 | 0.0 | -100 | 12.7 | 338 |
| Jamtara | 0.0 | -100 | ** | ** | 12.5 | 248 |
| Khunti | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Koderrna | 0.0 | -100 | 0.0 | -100 | 7.8 | 41 |
| Latehar | 0.0 | -100 | 0.0 | -100 | 7.0 | 71 |
| Lohardagga | 0.0 | -100 | 0.0 | -100 | 9.2 | 360 |
| Pakur | 0.0 | -100 | 0.0 | -100 | 10.3 | 186 |
| Palamau | 0.0 | -100 | 0.0 | -100 | 14.3 | 360 |
| Ramgarh | 0.0 | -100 | ** | ** | 2.8 | 4 |
| Ranchi | 0.0 | -100 | 0.0 | -100 | 4.9 | 17 |
| Sahebganj | 0.0 | -100 | 0.0 | -100 | ** | ** |
| Saraikela | 0.0 | -100 | 0.0 | -100 | 7.1 | 109 |
| Simdega | 0.0 | -100 | 0.0 | -100 | 3.1 | 35 |
| West Singbhum | 0.0 | -100 | 0.0 | -100 | 11.1 | 270 |
| East Rajasthan | | | | | | |
| Ajmer | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Alwar | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Banswara | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Baran | 0.0 | -100 | 0.0 | -100 | 4.8 | 98 |
| Bharatpur | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Bhilwara | 0.0 | -100 | 0.0 | -100 | 0.3 | -17 |
| Bundi | 0.0 | -100 | 0.0 | -100 | 0.3 | -59 |
| Chittorgarh | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Dausa | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Dholpur | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Dungarpur | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Jaipur | 0.0 | -100 | 0.0 | -100 | 0.4 | -64 |
| Jhalawar | 0.0 | -100 | 0.0 | -100 | 3.6 | 127 |

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|-----------------------------|-----|------|-----|------|-----|------|
| Jhunjhunu | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Karauli | 0.0 | -100 | 0.0 | -100 | 0.1 | -92 |
| Kota | 0.0 | -100 | 0.1 | -97 | 1.6 | -28 |
| Pratapgarh | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Rajsamand | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Sawai Madhopur | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Sikar | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Sirohi | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Tonk | 0.0 | -100 | 0.0 | -100 | 1.5 | 202 |
| Udaipur | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| West Rajasthan | | | | | | |
| Barmer | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Bikaner | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Churu | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Hanumangarh | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Jaisalmer | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Jalore | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Jodhpur | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Nagaur | 0.0 | -100 | 1.3 | -33 | 0.0 | -100 |
| Pali | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Sri Ganganagar | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Gujarat Region | | | | | | |
| Ahmedabad | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Anand | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Banaskantha | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Baroda | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Broach | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| DNH | 0.0 | -100 | ** | ** | ** | ** |
| Dahod | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Daman | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Dangs | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Gandhinagar | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Kheda | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Mehsana | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Narmada | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Navsari | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Panchmahal | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Patan | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Sabarkantha | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Surat | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Tapi | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Valsad | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| S K & Diu region | | | | | | |
| Amreli | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Bhavnagar | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Diu | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Jamnagar | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Junagarh | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Kutch | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |

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|---------------------------|-----|------|-----|------|-----|------|
| Porbandar | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Rajkot | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Surendranagar | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Maharashtra | | | | | | |
| Konkan & Goa | | | | | | |
| Mumbai City | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Mumbai Suburban | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| North Goa | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Raigad | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Ratnagiri | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Sindhudurg | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| South Goa | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Thane | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Madhya Maharashtra | | | | | | |
| Ahmednagar | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Dhule | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Jalgaon | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Kolhapur | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Nandurbar | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Nasik | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Pune | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Sangli | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Satara | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Solapur | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Marathwada | | | | | | |
| Aurangabad | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Beed | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Hingoli | ** | ** | 0.0 | -100 | 0.0 | -100 |
| Jalna | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Latur | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Nanded | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Usmanabad | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Parbhani | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Vidarbha | | | | | | |
| Akola | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Amraoti | 0.0 | -100 | 0.0 | -100 | 0.2 | -89 |
| Bhandara | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Buldhana | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Chandrapur | 0.0 | -100 | 0.0 | -100 | 0.3 | -79 |
| Gadchiroli | 0.0 | -100 | 0.0 | -100 | 3.4 | 49 |
| Gondia | 0.0 | -100 | 0.0 | -100 | 0.2 | -94 |
| Nagpur | 0.0 | -100 | 0.0 | -100 | 0.7 | -80 |
| Wardha | 0.0 | -100 | 0.0 | -100 | 0.7 | -79 |
| Washim | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Yeotmal | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Odisha | | | | | | |
| Angul | 0.0 | -100 | 0.0 | -100 | 0.5 | -77 |
| Balasore | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |

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|--|-------|------|-----|------|------|------|
| Bargarh | 0.0 | -100 | 0.0 | -100 | 4.9 | 105 |
| Bhadrak | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Bolangir | 0.0 | -100 | 0.0 | -100 | 1.1 | -50 |
| Boudh | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Cuttack | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Deogarh | 0.0 | -100 | 0.0 | -100 | 3.7 | 62 |
| Dhenkanal | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Gajapati | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Ganjam | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Jagatsingpur | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Jajpur | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Jharsuguda | 0.0 | -100 | 0.0 | -100 | 0.3 | -92 |
| Kalahandi | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Kandhamal | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Kendrapara | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Keonjhar | 0.0 | -100 | 0.0 | -100 | 3.1 | -40 |
| Khurda | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Koraput | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Malkangiri | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Mayurbhanj | 0.0 | -100 | 0.0 | -100 | 4.7 | 68 |
| Nawapara | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Nawarangpur | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Nayagarh | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Puri | 0.0 | -100 | 0.0 | -100 | 0.0 | -99 |
| Rayagada | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Sambalpur | 0.0 | -100 | 0.0 | -100 | 4.4 | 93 |
| Sonepur | 0.0 | -100 | 0.0 | -100 | 3.8 | 667 |
| Sundargarh | 0.0 | -100 | 0.0 | -100 | 0.2 | -93 |
| West Bengal & Andaman Nicobar Islands | | | | | | |
| A & N ISLAND | | | | | | |
| Nicobar | 799.9 | -10 | 0.0 | -100 | 47.6 | 205 |
| North & Middle Andaman | 405.8 | -29 | 0.0 | -100 | 0.0 | -100 |
| South Andaman | 736.5 | 4 | 0.0 | -100 | 0.0 | -100 |
| GWB | | | | | | |
| Bankura | 12.9 | -90 | 0.0 | -100 | 6.0 | 400 |
| Birbhum | 25.5 | -80 | 0.0 | -100 | 24.2 | 867 |
| Burdwan | 34.8 | -70 | 0.0 | -100 | 12.9 | 971 |
| East Midnapore | 82.2 | -66 | 0.0 | -100 | 0.6 | -84 |
| Hooghly | 29.1 | -77 | 0.0 | -100 | 0.3 | -86 |
| Howrah | 29.7 | -79 | 0.0 | -100 | 0.0 | -100 |
| Kolkata | 101.4 | -46 | 0.0 | -100 | 0.0 | -100 |
| Murshidabad | 58.7 | -59 | 0.0 | -100 | 38.0 | 1018 |
| Nadia | 51.3 | -57 | 0.0 | -100 | 0.0 | -100 |
| 24 Pargana (N) | 53.5 | -66 | 0.0 | -100 | 0.2 | -80 |
| Purulia | 23.7 | -79 | 0.0 | -100 | 5.4 | 81 |
| 24 Pargana (S) | 33.0 | -89 | 0.0 | -100 | 0.0 | -100 |
| West Midnapore | 36.7 | -72 | 0.0 | -100 | 3.7 | 87 |
| SHWB & Sikkim | | | | | | |

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|--------------------------|-------|------|------|------|------|------|
| Cooch Behar | 50.8 | -69 | 0.0 | -100 | 2.9 | -4 |
| Darjeeling | 59.5 | -59 | 0.0 | -99 | 3.7 | -56 |
| East Sikkim | 156.4 | -19 | 3.5 | 17 | 9.6 | 14 |
| Jalpaiguri | 104.2 | -44 | 2.1 | 0 | 3.8 | 4 |
| Malda | 17.2 | -86 | 0.0 | -100 | 16.9 | 483 |
| North Dinajpur | 2.6 | -98 | 0.0 | -100 | ** | ** |
| North Sikkim | 199.3 | -40 | 21.8 | 103 | 16.8 | 24 |
| South Dinajpur | 42.0 | -68 | 0.0 | -100 | 0.0 | -100 |
| South Sikkim | 116.5 | -39 | 2.0 | -35 | 10.4 | 24 |
| West Sikkim | 59.5 | -82 | 1.5 | -86 | 6.5 | -52 |
| Karnataka | | | | | | |
| Coastal Karnataka | | | | | | |
| Dakshina Kannada | 0.0 | -100 | 0.0 | -100 | 0.5 | 13 |
| Udupi | 0.0 | -100 | 0.0 | -100 | 2.0 | 186 |
| Uttara Kannada | 0.0 | -100 | 0.0 | -100 | 0.5 | 200 |
| N I Karnataka | | | | | | |
| Bagalkote | 0.0 | -100 | 0.0 | -100 | 0.3 | -80 |
| Belagavi | 0.0 | -100 | 0.0 | -100 | 0.0 | -92 |
| Bidar | 0.0 | -100 | 0.0 | -100 | 0.6 | -79 |
| Dharwad | 0.0 | -100 | 0.0 | -100 | 0.5 | -48 |
| Gadag | 0.0 | -100 | 0.0 | -100 | 0.4 | -40 |
| Haveri | 0.0 | -100 | 0.0 | -100 | 0.7 | 567 |
| Kalaburgi | 0.0 | -100 | 0.0 | -100 | 0.2 | -93 |
| Koppal | 0.0 | -100 | 0.0 | -100 | 0.6 | 1 |
| Raichur | 0.0 | -100 | 0.0 | -100 | 2.1 | 158 |
| Vijayapura | 0.0 | -100 | 0.0 | -100 | 0.1 | -96 |
| Yadgir | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| S I Karnataka | | | | | | |
| Ballari | 0.0 | -100 | 0.0 | -100 | 12.5 | 1461 |
| Bangalore Rural | 0.0 | -100 | 0.0 | -100 | 4.3 | 967 |
| Bangalore Urban | 0.0 | -100 | 0.0 | -100 | 2.8 | 295 |
| Chamarajanagar | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Chikaballapur | 0.0 | -100 | 0.0 | -100 | 3.5 | 607 |
| Chikkamagaluru | 0.0 | -100 | 0.0 | -100 | 1.0 | 92 |
| Chitradurga | 0.0 | -100 | 0.0 | -100 | 1.3 | 29 |
| Davangere | 0.0 | -100 | 0.0 | -100 | 0.8 | 92 |
| Hassan | 0.0 | -100 | 0.0 | -100 | 1.3 | 125 |
| Kodagu | 0.0 | -100 | 0.0 | -100 | 0.3 | -53 |
| Kolar | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Mandya | 0.0 | -100 | 0.0 | -100 | 2.7 | 78 |
| Mysuru | 0.0 | -100 | 0.0 | -100 | 2.4 | 121 |
| Ramanagara | 0.0 | -100 | 0.0 | -100 | 1.4 | 69 |
| Shivamogga | 0.0 | -100 | 0.0 | -100 | 1.1 | 986 |
| Tumakuru | 0.0 | -100 | 0.0 | -100 | 7.0 | 435 |
| Kerala | | | | | | |
| Alappuzha | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Kannur | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Ernakulam | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Idukki | 0.0 | -100 | 0.0 | -100 | 4.7 | 76 |

| | | | | | | |
|-------------------------------|-----|------|-----|------|-----|------|
| Kasaragod | 0.0 | -100 | 0.0 | -100 | 0.5 | -10 |
| Kollam | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Kottayam | 0.0 | -100 | 0.0 | -100 | 3.7 | 28 |
| Kozhikode | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Malappuram | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Palakkad | 0.0 | -100 | 0.0 | -100 | 0.2 | -48 |
| Pathanamthitta | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Thiruvananthapuram | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Thrissur | 0.0 | -100 | 0.0 | -100 | 9.5 | 1254 |
| Wayanad | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Tamil Nadu | | | | | | |
| Ariyalur | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Chennai | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Coimbatore | 0.0 | -100 | 0.0 | -100 | 0.8 | -55 |
| Cuddalore | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Dharmapuri | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Dindigul | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Erode | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Kanchipuram | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Kanyakumari | 0.5 | -89 | 0.0 | -100 | 0.0 | -100 |
| Karikal | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Karur | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Krishnagiri | 0.0 | -100 | 0.2 | -90 | 0.0 | -100 |
| Madurai | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Nagapattinam | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Namakkal | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Nilgiris | 0.0 | -100 | 0.0 | -100 | 0.1 | -99 |
| Perambalur | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Puducherry | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Pudukottai | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Ramanathapuram | 0.0 | -100 | 0.1 | -99 | 0.0 | -100 |
| Salem | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Sivaganga | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Thanjavur | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Theni | 0.0 | -100 | 0.0 | -100 | 1.6 | -54 |
| Tirunelveli | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Tirupur | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Tiruvallur | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Tiruvannamalai | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Tiruvarur | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Toothukudi | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Trichy | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Vellore | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Villupuram | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Virudhunagar | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Andhra Pradesh | | | | | | |
| Coastal Andhra Pradesh | | | | | | |
| East Godavari | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |

| | | | | | | |
|--------------------|-----|------|-----|------|-----|------|
| Guntur | 0.0 | -100 | 0.0 | -100 | 0.1 | -96 |
| Krishna | 0.0 | -100 | 0.0 | -100 | 0.0 | -98 |
| Nellore | 0.0 | -100 | 0.0 | -100 | 0.3 | -96 |
| Prakasam | 0.0 | -100 | 0.0 | -100 | 0.4 | -88 |
| Sirkakulam | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Visakhapatnam | 0.0 | -100 | 0.0 | -100 | 0.0 | -97 |
| Vizianagram | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| West Godavari | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Rayalaseema | | | | | | |
| Anantapur | 0.0 | -100 | 0.0 | -100 | 5.8 | 188 |
| Chittoor | 0.0 | -100 | 0.0 | -100 | 0.0 | -100 |
| Cuddapah | 0.0 | -100 | 0.0 | -100 | 3.8 | 219 |
| Kurnool | 0.0 | -100 | 0.0 | -100 | 3.8 | 845 |
| Telangana | | | | | | |
| Adilabad | 0.0 | -100 | 0.0 | -100 | 1.3 | -58 |
| Hyderabad | 0.0 | -100 | 0.0 | -100 | 1.5 | -33 |
| Karimnagar | 0.0 | -100 | 0.0 | -100 | 0.3 | -91 |
| Khammam | 0.0 | -100 | 0.0 | -100 | 1.2 | 23 |
| Mehabubnagar | 0.0 | -100 | 0.0 | -100 | 0.1 | -92 |
| Medak | 0.0 | -100 | 0.0 | -100 | 0.3 | -88 |
| Nalgonda | 0.0 | -100 | 0.0 | -100 | 1.8 | 13 |
| Nizamabad | 0.0 | -100 | 0.0 | -100 | 1.0 | -71 |
| Rangareddy | 0.0 | -100 | 0.0 | -100 | 0.6 | -25 |
| Warangal | 0.0 | -100 | 0.0 | -100 | 2.9 | 80 |

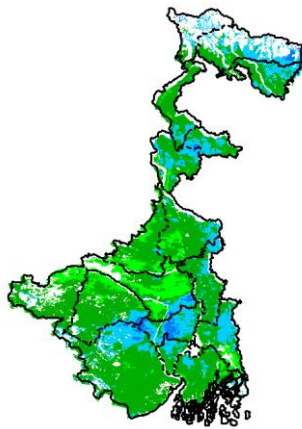
Legends

| | | | |
|--|----------------------------------|----|--------------------------------|
| | (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

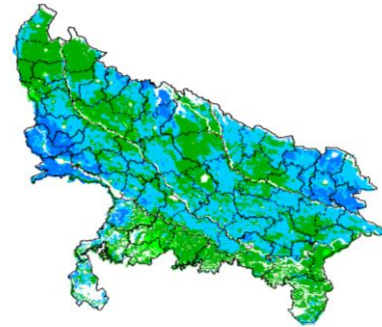
INSAT 3A CCD NDVI COMPOSITE MAPS FOR THE WEEK ENDING ON
21th January 2016 FOR DIFFERENT STATES

West Bengal



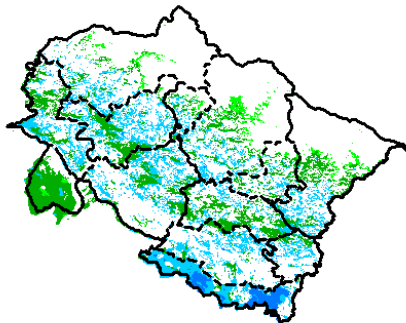
Agricultural vigour is good in central and Northern part of West Bengal where NDVI is varying from 0.4-0.5, whereas rest of the state shows moderate NDVI (0.2-0.4).

Uttar Pradesh



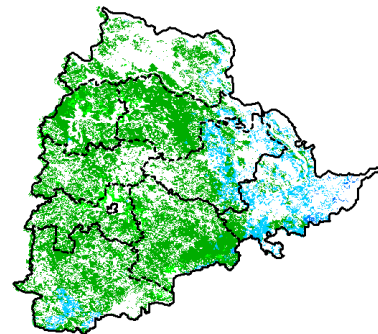
Agricultural vigour is moderate over the entire state of Uttar Pradesh where NDVI value varies from 0.2-0.4. whereas few patches in north-western part shows higher values of NDVI (0.4-0.5)

Uttarakhand



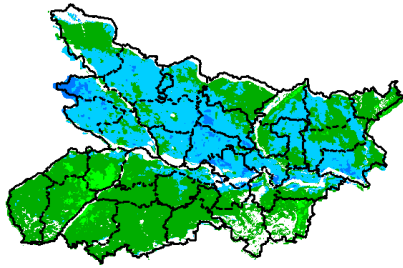
Agricultural vigour is good over entire state of Uttarakhand where NDVI is varying from 0.3-0.4, whereas few patches in south shows good values of NDVI (0.4-0.6).

Telangana



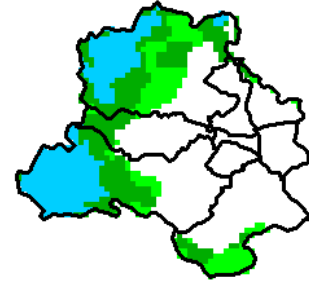
Agriculture vigour is good over South and Eastern parts of Telangana (NDVI 0.4-0.5). Rest of the region shows moderate values of NDVI (0.3-0.4)

Bihar



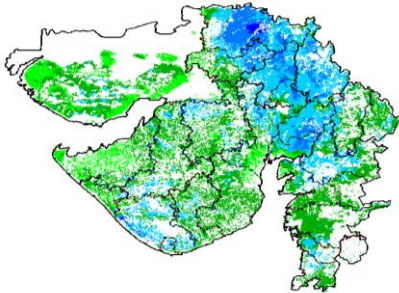
Agriculture vigour is Moderate all over Bihar where NDVI value lies between 0.2-0.4. Except very few patches in north-western parts of state vary from 0.4-0.5.

Delhi



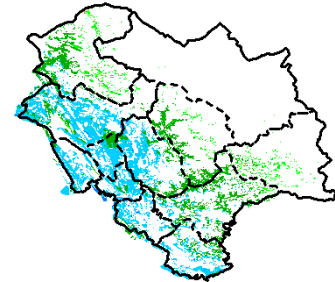
Agriculture vigour is moderate all over Delhi where NDVI value lies between 0.2-0.3, whereas few patches over west shows good values of NDVI (0.4 – 0.5).

Gujarat



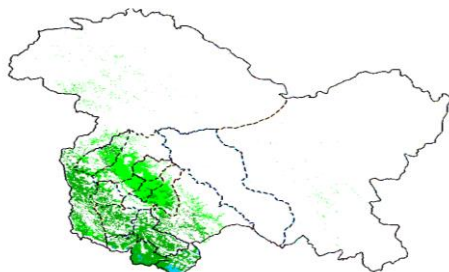
Agriculture vigour is moderate in Kutch and Saurashtra whereas, good agricultural vigour is observed over Gujarat region where NDVI values lies between 0.4-0.6.

Himachal Pradesh



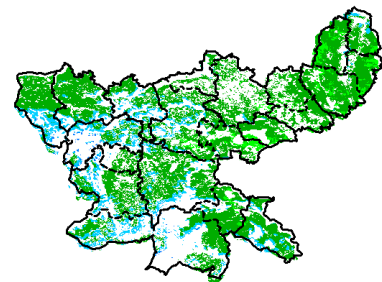
Agriculture vigour is good over western and southern part of Himachal Pradesh where NDVI values are 0.4 – 0.5, whereas rest of the state shows moderate values of NDVI.

Jammu & Kashmir



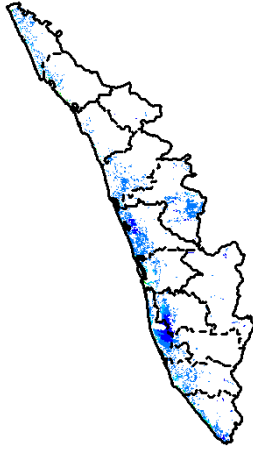
Agriculture vigour is Normal over entire state of Jammu & Kashmir where NDVI values are 0.2 – 0.4.

Jharkhand



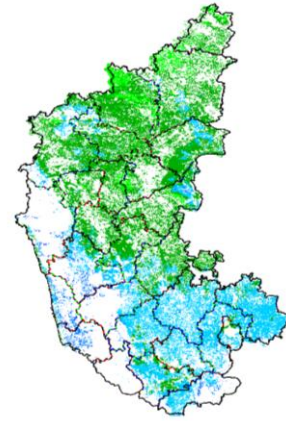
Agriculture vigour is good over western part of the Jharkhand where NDVI values vary from 0.4 - 0.5, whereas rest of the state shows moderate values of NDVI (0.3-0.4).

Kerala



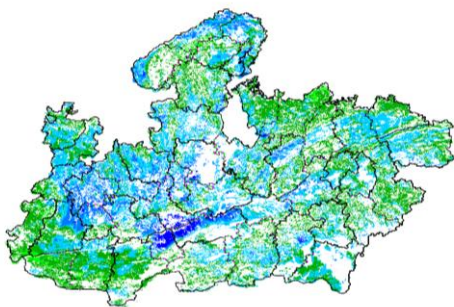
Agriculture vigour is good over entire state of Kerala where NDVI value lies between 0.5-0.6.

Karnataka



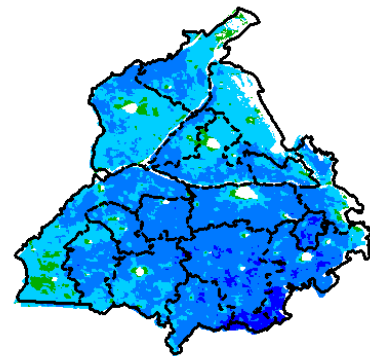
Agriculture vigour is moderate over entire state of Karnataka where NDVI value lies between 0.2-0.4 except few patches in southern part shows good values of NDVI (0.4 -0.5).

Madhya Pradesh



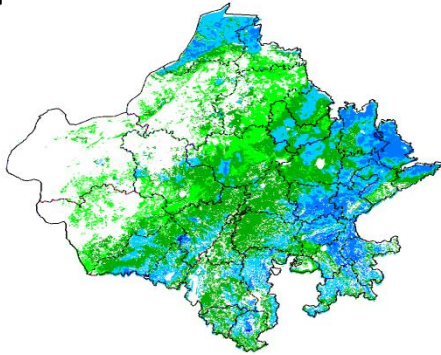
Agriculture vigour is good over western and central part of Madhya Pradesh where NDVI varies from 0.4-0.6 and rest of the part shows moderate values of NDVI (0.2 – 0.4).

Punjab



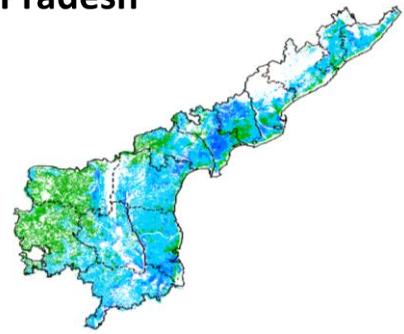
Agricultural vigour is very good over central, eastern and southern part of Punjab where NDVI value lies between 0.4-0.6.

Rajasthan



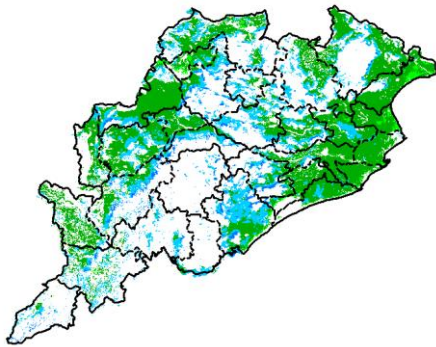
Agriculture vigour is moderate (0.2-0.4) in some patches over central part of Rajasthan whereas good values of NDVI are observed over eastern and northern parts of state (0.4-0.6).

Andhra Pradesh



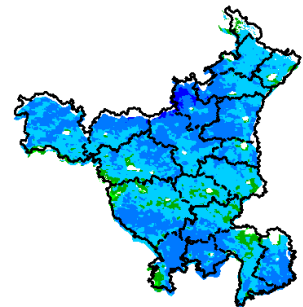
Agriculture vigour is good over entire state of Andhra Pradesh where NDVI vary between 0.4-0.6. except western parts which shows normal values of NDVI (0.2-0.3).

Odisha



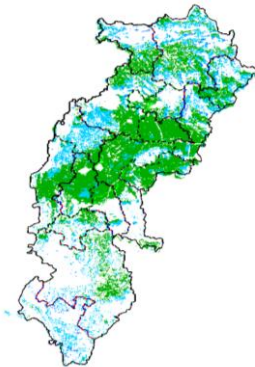
Agricultural vigour is good over central and southern part of Odisha with NDVI value ranging between 0.4 – 0.6 . North eastern part shows moderate values of NDVI (0.3-0.4).

Haryana



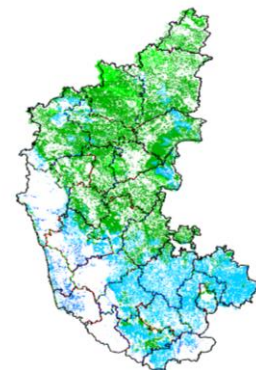
Agriculture vigour is very good over state of Haryana where NDVI value lies between 0.4 – 0.6. whereas few patches in central part shows moderate values of NDVI (0.3-0.4)

Chhattisgarh



Agriculture vigour is good in northern and southern parts

Karnataka

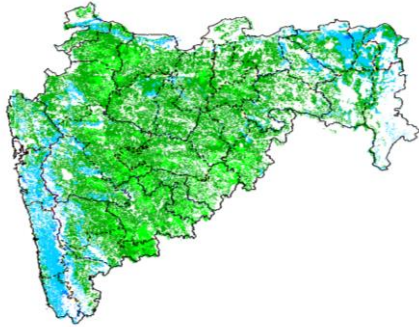


Agriculture vigour is good over southern part of Karnataka state where NDVI value lies between

of Chhattisgarh where NDVI values are between 0.4-0.5 except central part which shows moderate values of NDVI.

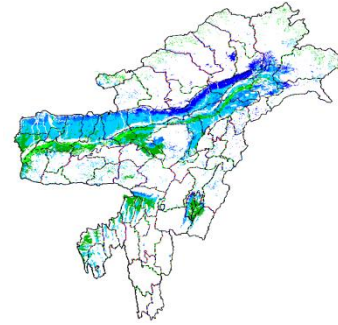
0.4-0.6 except few patches in northern part shows good values of NDVI (0.4 -0.5).

Maharashtra

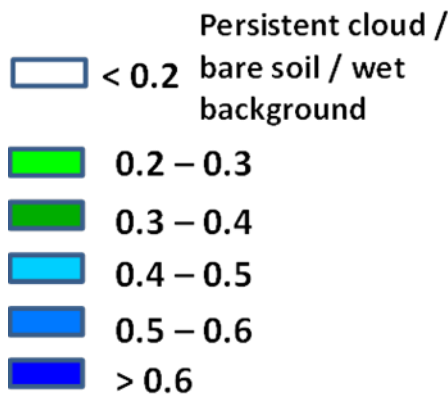


Agricultural vigour is good over Coastal Maharashtra and Vidarbha region with NDVI values from 0.4-0.5, whereas Moderate values of NDVI are observed over Madhya Maharashtra and Marathwada region (0.2-0.4).

North East Region



Agriculture vigour is good over entire states of North-East region where NDVI varies from 0.4-0.6.



Annexure III

List of varieties

Assam

Boro rice : Mahsuri, IR-50, Dinanath, Bishnuprasad, Jyotiprasad, Kanaklata and Dinanath.

Okra : Pusa Sawani, Arka Anamika, Parbhdani Kranti

Meghalaya

Toria: M27, TS 36, TS 46; Lentil- DPL 15, DPL-62.

Pea : Prakash, Vikash.

Manipur

Onion : Nasik Red

Odisha

Mango: Baiganpalli, Totapuri, Bombay green, Suvarnarekha, Neelam, Himsagar,, Langra, Dusheri, Amrapalli, Mallika, Ratna, Ramkella, Alphanso and Keshar, etc.

Cashewnut: Vengrulla-1.4, BPP-4, Bhubaneswar-1, VRI-2, Hybrid 2-17

Pulses

Green gram: K 851, PDM 11, PDM 54, OUM 115

Black gram: T 9, PU 11, PU 19 and PU 30

Horse gram : Urmi

Sunflower: DRSF- 108, DRSF- 113, TNAUSUF-7, Modern

Toria- M27, TS 36, TS 46;

Lentil- DPL 15, DPL-62;

Pea - Prakash, Vikash.

Bihar

Potato: KufriJyoti.Kufri Ashoka,Pukharaj

Pulses: K-75, PL77,KLS-218

Lentil: BR-25,Pant L 406,Malika,Arun

Kidney Pea: PDR-14,IIDR 96-4,IIPR 98-5

Peas: Ratna, Aprnaharbjajan Malbai mater15

Garlic: Jamuna Safed-2(G-50),Jamuna safed-3(G-282) Jamuna-4(G-323)

Jharkhand

Lentil: P.L.-406, P.L.-639, K.L.S -218,K-75

Barley: Jyoti,Ratna,D.L.-36,B.R.-32

Linseed: Sweta,Shubhra, T-397

Field Pea: Rachna,DDR-23, Swarnrekha

Onion : N-53,Pusa red,Arka nketan, Arka kalian

West Bengal

Mango: Himsagar, Mallicka, Langra

Guava: Safeda, L-49

Coconut: Eastcoastal, Hazari

Banana: Mortoman, Chapa, Kathali, Singapuri,

Mustard: Varuna, Sita and Bhagirathi

Jammu & Kashmir

Cabbage: Golden Acre, Pride of India and PusaMukta.

Cauliflower: Giant Snow Ball, Pant Gobh 2 & 3 and Pusa Synthetic.

Pea : AP-1, Bonnevillea, Rachna and Arkel);

Chickpea : K-468, Gourav);

Lentil: L-4147, L-9/12,PL-406)

Wheat(late sown) : PBW-175, PBW-396, RSP-81(Jitto)

Mustard :Pusa Bold, RSPR-01, RSPR-03, Kranti.

Uttarakhand

Sugarcane: Co-238, Co-241, Co Pant 3220, Co Pant 84211, COS-8436, COS-88230 etc. and medium to late sown varieties like Co Pant 90223, Co Pant-96219, COS-97222, COS-767, COS-1148

Barley :Jyoti, Vijaya, or Jagrati

Oat : UPO-50, UPO-212, JHO-822, Kent Etc

Himachal Pradesh

Cauliflower: snowball and Giant snowball.

Radish:Japanese white, Chinese pink and mino early white

Turnip: PTWG-1

Carrot:Pusakesar

Fenugreek :I.C. 74, kasoori.

Peas :Mater ageta-6 (early variety).

Cabbage:Pride of India, golden achor and hybrid

East Uttar Pradesh

Sugarcane: coj-64, cos-96268, cos-98231, cos-767, cos-84, cos-32, copant-84212, Ko.Sha.-88230, 95255, Ko.Sha.-95436, 01235.

Tomato: pusa early, pusa ruby, HS 101.

Cauliflower: pusaDipali.

Okra:PusaSawani, VarsaUphar, Azad kranti.

Brinjal: Pant Samrat, Pant Rituraj, Pusa hybrid-6.

Guava:Sardar(Lucknow-49).

Pea:Rachna, Pantmatar-5, Aparna, Malviya Matar-2, Malviya Matar-15, Shikha and Sapna(K.P.M.R.-144-1), Ta-163, Jay(K.P.M.R.522), Hariyal, Pant P-42, Aman 2009;

Cabbage:Japani, PusaDieepali, PusaKartiki

Toria: TA-9, Bhawani, PT-30 and PT-507

Potato:KufriChandramukhi, KufriSadabahar, KufriAshoka,kufrijawahar, kufirilalima, kufribahar, kufribadshah, kufrisatlaj, kufrianand, kufri chipsona-1, kufri chipsona-3, kufrisinduri, kufrisurya.

Lentil: Ta-8, Pant L-406, and 234.

West Uttar Pradesh

Ladies finger:VRO-6, VRO-5.

Pigeon pea:T-21, UPAS 120.

Sugarcane: ko.sha 88230, ko.sha 8436, ko 0238, ko.sha 07250 or U.P. 0512.

Barseem: V.L.1,V.L.10, maskavi, jai,K-8027, K-9565, Mandakini.

Onion: pusa red, pusa white.

Vegetable Pea: Azad P-3, arkil, Jai, Indra, Prakash.

Punjab

Wheat: PBW 621, DBW 17, PBW 550, PBW 502, PBW 343, WH 542, PDW 291, PDW 274 and PDW

Sugarcane: CoJ-85, CoJ-83, CoJ-64 (early maturing), COH-119, CoJ-88, CoS-8436 for and CoJ-89,CO118, COJ85, COJ64.

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

Onion: Punjab Naroya, Punjab White and PRO 6.

Pea: Punjab 89 and MithiPhali, Matar Ageta-7, Arkel and Matar Ageta-6.

Kabuli gram (L 552, L 550 & BG-1053)

Mustard: PBR 357, RLC-1, PBR-210, RLM-619, PBR-91, PBR-97, RLC-1, PBR 210 and PBR 91, Gobhisarson GSC-7, GSC-6, GSL-1, GSL-2, Hyola (PAC-401), African sarson PC-5.

Radish: Punjab Pasand and Japanese white.

Turnip: L-1.

Carrot: Punjab Black Beauty, Punjab Carrot Red and PC-34.

Tomato:TH-1,PunjabRatta, Punjab NR 7, Punjab Chhuhara, Punjab Upma, Castle Rock.

Delhi

Oat : J.H.O-822, O.L.-9, Pusa oat-5;

Barseem:Vardan, Buland Barseem-1, Masakavi, J.B-3;

Lentil:PusaMasoor -5 (L-4594).

Sarso:Pusa Saag-1; Bathua- Pusa Bathua-1;

Radish:Japani White, Hill queen, French Radish;

Spinach: PusaBharti.

Amaranths: PusalalChaulai, PusaKiran.

Ladyfinger: Pusa A-4.

Pea:Azad Matar-1, Pant Matar-3 and Bournville.

Carrot:PusaMridula, Japanese White and PusaHimani,

Radish:Japani White, Hill queen, French Radish;

Spinach:All Green, PusaBharti;

Fenugreek:PusaKasuri;

Coriander:PantHaritama, Hybrids;

Turnip:Pusa Swati, Local Red variety

West Rajasthan

Isabgol : RI 89 & GI-2

Fenugreek :RMt 1 &RMt 305

Barley: RD 2052, RD 2035 (suitable for saline and alkali soils) and RD 2715 (dual purpose),RD2058,2503,103,NDB1173.

cumin: GC 4, RZ -19, RZ 223, RZ19,209,223and GC4b.

Cowpea:RC-19, RC-101, RCP-27.

Oat :OS 6, OS 9

Berseem: BL 10, BL 22

Cauliflower: Pusa snow ball K-1, Hisar-1, Dania and Selection-7

Radish: (Pusa Rashmi).

Carrot: Pusa Keshar

East Rajasthan

Radish: Pusa Chetki, Japanese white & hill queen.

Carrot: Pusa Keshar

Cowpea: Short duration C-152, RS-9, FS-68, RC-19 and RC-101, C-152, RS-9.

Gram: RSG-888,895 (Anubhav), CSJD-884 (Aakash), RSG-44, Pusa-209, C-235, H-208, Pratap raj chana, RSG-888, Dahod yellow, ICCV-10 and Pratap Chana-1.

Cauliflower: Pusa snow ball K-1, Hisar-1, Dania and Selection-7

Onion: Punjab safed goal, Udaipur 102, nasik red.

Lucerne : Anand-2, LLC-3, RL-88 & Type-9

Berseem: Muskavivardan and Pusa Jiant

Barley : RD-2552, RD-2052, RD-2035, RD-2503, RD-2715, RD-2660 and Jyoti.

Madhya Pradesh:

Lentil: RVL 31, JL 2.

Mustard: RVM 2, RGN 73, Pusa Jai Kisan.

Chhattisgarh:

Linseed: R.L.C. 92 (Indira Alsi), Dipika (R.L.C.-78), Indira Alsi (R.L.C.-81), Kartika (R.L.C.-76), Jawahar 552 (R.L.C.-552), Kiran (R.L.C.-6).

Safflower: J.S.F.-1, J.S.I-7, J.S.H.-129.