



National Agromet Advisory Service Bulletin

based on

Extended Range Weather Forecast (ERFS)

Validity: 09 - 22 October 2020

Date of issue: 09 October 2020

Issued by

**AICRP on Agro-Meteorology (AICRPAM),
Central Research Institute for Dryland Agriculture (CRIDA),
Indian Council of Agricultural Research (ICAR)**

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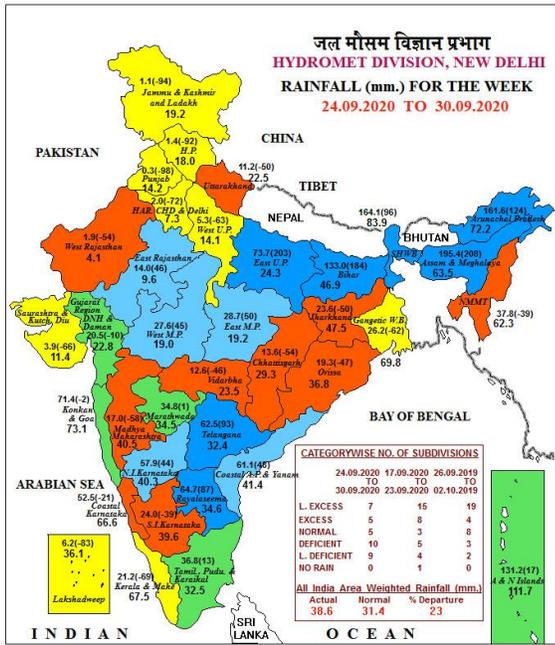
**India Meteorological Department (IMD),
Earth System Science Organization**

Realized Rainfall and Extended Range Forecast (Rainfall and Temperatures)

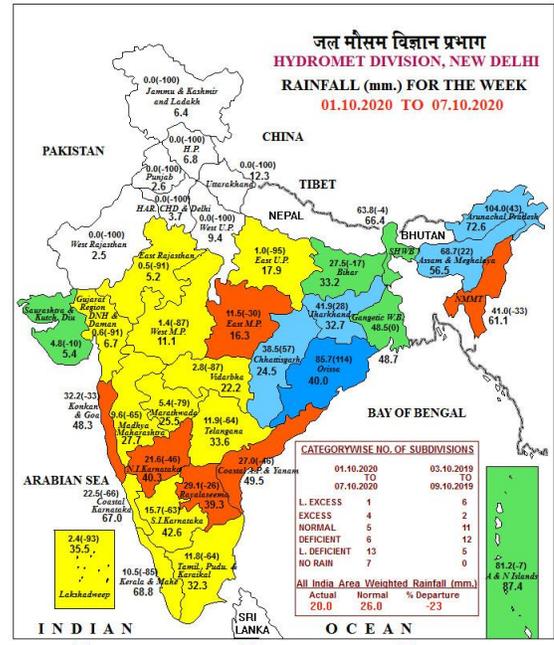
Realized Rainfall

(24th Sept. to 7th October, 2020)

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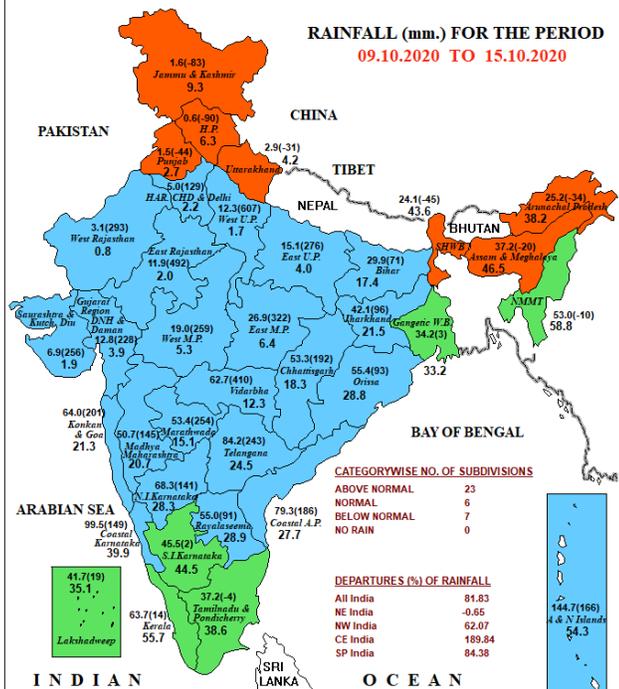
- Normal or above normal rainfall occurred in both the weeks in Arunachal Pradesh, Assam & Meghalaya, Bihar, Sub-Himalayan West Bengal & Sikkim and Andaman & Nicobar Islands.
- Normal or above normal rainfall occurred in either of the two weeks in East Uttar Pradesh, East Rajasthan, Jharkhand, Gangetic West Bengal, Odisha, Gujarat Region, Saurashtra & Kutch, Madhya Pradesh, Chhattisgarh, Konkan & Goa, Marathwada, Telangana, Coastal Andhra Pradesh & Yanam, Rayalaseema, North Interior Karnataka and Tamil Nadu Puducherry & Karaikal.
- Below Normal rainfall /no rain occurred in Jammu & Kashmir and Ladakh (UTs), Uttarakhand, Himachal Pradesh, Punjab, Haryana Chandigarh & Delhi, West Rajasthan, West Uttar Pradesh, Madhya Maharashtra, Vidarbha, Coastal Karnataka, South Interior Karnataka, Kerala & Mahe, Nagaland Manipur Mizoram & Tripura (NMMT) and Lakshadweep.

Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC – 07 October) (9th to 22nd October, 2020)

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Rainfall Forecast Map - Normal RF Based Categories

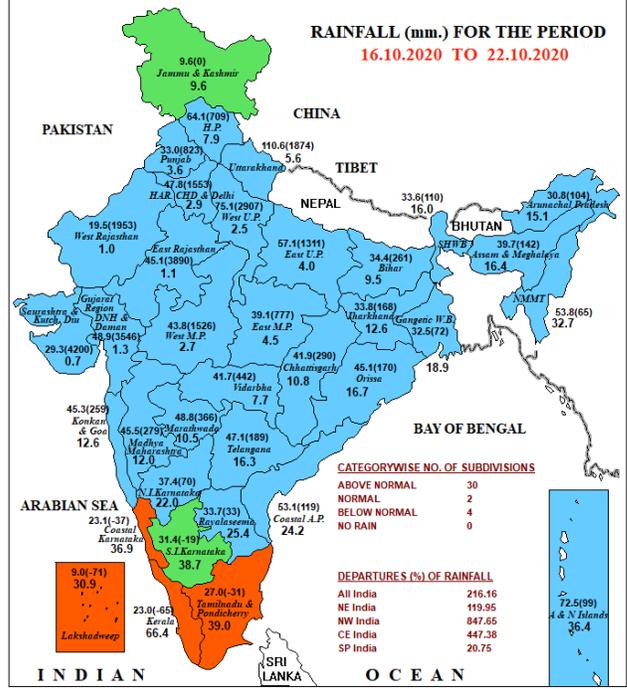


LEGEND: ■ ABOVE NORMAL (+20% OR MORE) ■ NORMAL (+19% TO -19%)
■ BELOW NORMAL (-20% TO -99%) ■ NO RAIN (-100%) ■ NO DATA

NOTES:
 [a] Rainfall figures are based on MME Forecast data.
 [b] Small figures indicate actual rainfall (mm.), while bold figures indicate Normal rainfall (mm.)
 Percentage Departures of Rainfall are shown in Brackets.

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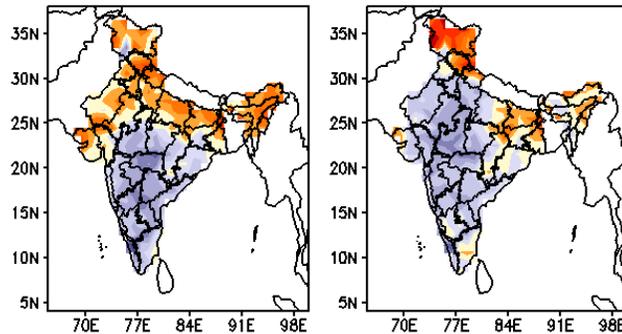
- **Week 1 (09.10.2020 to 15.10.2020) and Week 2 (16.10.2020 to 22.10.2020):** Above normal rainfall likely over most parts of India in week 1 and week 2 except some parts of northwest India and extreme south peninsular in week 1.

**Maximum and Minimum temperature anomaly ($^{\circ}\text{C}$) forecast
for next 2 weeks (IC – 07 October)
(9th to 22nd October, 2020)**

MME forecast Tmax anomaly (Deg C)

(Week1: 09Oct–15Oct)

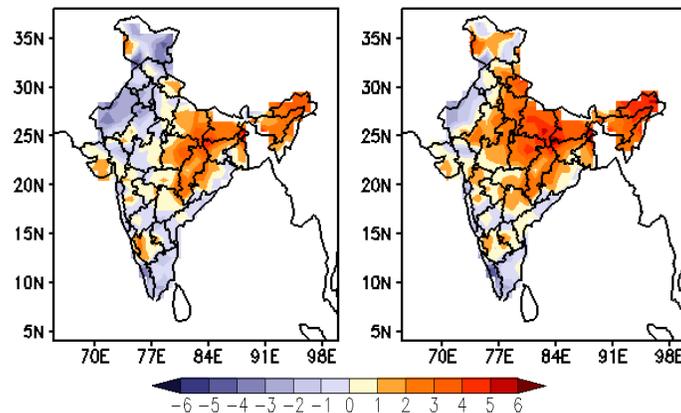
(Week2: 16Oct–22Oct)



MME forecast Tmin anomaly (Deg C)

(Week1: 09Oct–15Oct)

(Week2: 16Oct–22Oct)



Maximum Temperature (Tmax)

- **Week 1 (09.10.2020 to 15.10.2020) and Week 2 (16.10.2020 to 22.10.2020):** Except northwest India and parts of Northeast India, Tmax will be below normal over most of the remaining parts of India.

Minimum Temperature (Tmin)

- **Week 1 (09.10.2020 to 15.10.2020) and Week 2 (16.10.2020 to 22.10.2020):** Mainly above normal Tmin likely in week 1 and week 2 over eastern parts of India (Odisha, Chhattisgarh, Gangetic West Bengal, Bihar, Jharkhand, Uttar Pradesh and adjoining regions) and northeastern parts of the country. Tmin will be slightly less than normal over rest of India.

Strategic Agricultural Planning based on rainfall during next two weeks till 22 October 2020

Agro-met Advisories

Kerala

Amount of rainfall received over Kerala is 2242.9 mm (5% excess) during 01 June 2020 - 08 October 2020. The extended range weather forecast for next two weeks (09 - 15 October and 16 - 22 October 2020) is normal for week-1 and below normal for week-2.

- Due to rainy weather condition, there is a chance of anthracnose disease in nutmeg. To control, it is advised to apply Trichoderma mixture or 1% Bordeaux mixture.
- For the management of the aphid attacks in cowpea, it is advised to spray Raksha @ 6g/litre or Neem soap @ 10 g/litre as an organic measure.

Tamil Nadu

Amount of rainfall received over Tamil Nadu is 459.1 mm (21% excess) during 01 June 2020 - 08 October 2020. The extended range weather forecast for next two weeks (09 - 15 October and 16 - 22 October 2020) is normal for week-1 and below normal for week-2.

- Present weather condition is favorable for mealy bug incidence in cotton. It is advised to spray Neem oil 2% or NSKE 5% or fish oil resin soap 25g/litre of water.
- Prevailing weather condition is also congenial for mosaic incidence in gourds. It is advised to spray Monocrotophos @ 1.5 ml/litre or Chlorpyrifos 2.5 ml + Neem oil 2 ml/litre of water.
- Prevailing weather condition is favorable for smallpox and PPR diseases in goat. Farmers are advised to do proper vaccination for avoiding animal losses.

Maharashtra

Rainfall received over Madhya Maharashtra is 976.3 mm (25% excess), Marathawada is 871.5 mm (25% excess), Vidharbha is 865.2 mm (-11% deficit) and Konkan region 3694.5 mm (26% excess) during 01 June 2020 - 08 October 2020. The extended range weather forecast for next two weeks (09 - 15 October and 16 - 22 October 2020) over Madhya Maharashtra, Vidharbha, Marathawada and Konkan is above normal for week-1 and week-2.

Madhya Maharashtra

- Under prevailing weather condition, sowing of safflower (varieties SSF-708 and PBNS-120 and sunflower (Variety Phule Bhaskar) is advised.
- For control of American army worm attack in crops, it is advised to use pheromone trap @ 5 per ha or apply 50,000 eggs of *Trichogram pritiolum* or *Telenomus remus* parasite per acre three times in one-week interval.

Marathawada

- Due to rainy weather condition, there is a chance of *helicoverpa armigera* in *kharif* sorghum crop. To control, spray of 5% NSKE or dusting of Malathion powder 5% @ 20 kg per ha or Malathion 50% @ 10 ml per 10 litres of water during clear weather condition is advised.
- For management of rhizome fly in turmeric, it is advised to take alternate spray of Quinalphos 25% @ 20 ml or Diamethoate 30% @ 10 ml/10 litres of water along with sticker during clear

weather condition at an interval of 15 days.

Vidharbha

- For the management of pink boll worm larvae in cotton flowers, it is advised to collect and destroy rosette flowers/buds and if infestation is more than 10% (ETL) spray of Profenofos 50% EC @ 30 ml or chlorpyrifos 50% EC @ 20 ml per 10 litres of water is advised.

Konkan

- Due to chances of rainfall and high temperature, there is a possibility of incidence of tea mosquito bug on new flush of cashewnut. It is advised to spray Monocrotophos 36% SL @ 15 ml or Lambda cyhalothrin 5% EC @ 6 ml/10 litres.
- Due to chances of intermittent rainfall and high temperature, there is a possibility of incidence of army worm in early, mid and late rice varieties. To control, it is advised to harvest the matured early rice varieties immediately and in mid and late rice varieties, spray Lambda cyhalothrin 5% EC @ 6 ml or Cypermethrin 25% EC @ 3 ml per 10 litres of water.

Hisar

Amount of rainfall received over Hisar is 379.8 mm (-15% deficit) during 01 June 2020 - 08 October 2020. The extended range rainfall forecast provided for next two weeks (09 - 15 October and 16 - 22 October 2020) over Hisar is above normal for week-1 and week-2.

- Due to high humidity and favorable temperature, farmers are advised to monitor the insect-pest/diseases in rice crop.
- Due to humid weather condition, farmers are advised to keep animals under well ventilated place and provide plenty of clean drinking water and green forage as per requirement.

Karnataka

Rainfall received during 01 June 2020 - 08 October 2020 over South Interior Karnataka is 835.2 mm (15% excess) and North Interior Karnataka is 761.1 mm (41% excess). The extended range weather forecast for next two weeks (09 - 15 October and 16 - 22 October 2020) over South Interior Karnataka is normal and North Interior Karnataka is above normal for week-1 and week-2.

South Interior Karnataka

- Under prevailing weather condition, there is a chance of wilt disease in redgram. It is advised for drenching with Carbendazim 50 WP @ 2 g/litre of water. Remove and burn the infected plants in the field.
- For the management of stem borer in maize, it is advised to spray Quinolphos 25 EC @ 2ml/litre of water or Chlorophyrifos 20 EC @ 2ml/litre of water.

North Interior Karnataka

- Farmers are also advised to sow the crops in rows across the slope to facilitate better soil moisture conservation.

- Farmers are advised to vaccinate livestock against foot and mouth disease (FMD vaccination), black quarter disease (BC vaccination) and *haemorrhagic septicaemia*.

Assam

Amount of rainfall received over Assam is 2220.9 mm (21% excess) during 01 June 2020 - 08 October 2020. The extended range weather forecast provided for next two weeks (09 - 15 October and 16 - 22 October 2020) on rainfall over Assam is below normal for week-1 and above normal for week-2.

- Due to rainfall, high humidity and high temperature, there is a possibility of occurrence of blast and brown spot disease in Sali rice. To control, application of Carbendazim @ 1.0 g/litre of water or Glyodin or Trifloxystrobin at an interval of 15 days is advised.
- Prevailing weather condition is favourable for sowing of mid season crop like cauliflower, broccoli, cabbage and knol khol seeds in nursery seed bed.

Uttar Pradesh

Rainfall received during 01 June 2020 - 08 October 2020 over East Uttar Pradesh 785.8 mm (-8% deficit) and West Uttar Pradesh is 455.3 mm (-38% deficit). The extended range weather forecast for next two weeks (09 - 15 October and 16 - 22 October 2020) over East Uttar Pradesh and West Uttar Pradesh is above normal for week-1 and week-2.

Western Uttar Pradesh

- Under prevailing weather condition, there is a chance of leaf webber attack in pigeon pea fields. It is advised to spray Emamectin benzoate 5% SG @ 250 g/ha or Cypermethrin 25% EC @ 500 ml/ha with 500 litres water solution.
- For the management of shoot borer and grass hopper in sorghum, it is advised to apply 2% dust of Fenthroet @ 25 to 30 kg/ha or Chlorantraniliprole 18.5% SC @ 150ml/ha with 500 to 600 litres of water.

Eastern Uttar Pradesh

- Under prevailing dry weather condition, pulverization followed by planking for conservation of soil moisture in the field is advised for the sowing of Toria and Ageti Rai.

Odisha

Amount of rainfall received over Odisha is 1228.7 mm (2% excess) during 01 June 2020 - 08 October 2020. The extended range rainfall forecast provided for next two weeks (09 - 15 October and 16 - 22 October 2020) over Odisha is above normal for week-1 and week-2.

- Due to humid weather condition, there is a chance of brown plant hopper infestation in paddy. To control, it is advised to spray Neem based pesticide (Azadirachtin) 1500 ppm @ 600- ml/acre at the base of the plant.
- Prevailing weather condition is congenial for sucking pest in okra. To control, spray of Azadirachtin 1500 ppm @ 600 ml/acre or Thiamethoxam 25% WG @ 40 g/acre or Acetamiprid 20% SP @ 50g/acre by mixing it in 200 litres of water is advised.

Jammu

Amount of rainfall received over Jammu is 376.2 mm (-34% deficit) during 01 June 2020 - 08 October 2020. The extended range weather forecast provided for next two weeks (09 - 15 October and 16 - 22 October 2020) on rainfall over Jammu is below normal for week-1 and normal for week-2.

- Under prevailing weather condition, sowing of mustard and gobi sarson is advised. Recommended varieties are Pusa Bold, RSPR-01, RSPR-03, Kranti.
- Under prevailing weather condition, sowing of winter vegetables like potato, radish, carrot, turnip, methi and spinach is advised.

Rajasthan

Amount of rainfall received over East Rajasthan is 592.2 mm (-3% deficit) during 01 June 2020 - 08 October 2020. The extended range weather forecast provided for next two weeks (09 - 15 October and 16 - 22 October 2020) on rainfall over East Rajasthan is above normal for week-1 and week-2.

- Under prevailing weather condition, sowing of early mustard may be taken up with recommended varieties RGN-73, Bio-902 (Pusa Jai kisan), Aashirwad, RH-9304 (Vasundhara), RH-9802 (Swarn Jyoti), RH-8812 (Laxmi), DRMRIJ-31 (Giriraj).
- Farmers are also advised for nursery sowing of *rabi* onion with improved varieties viz., Punjab white round, Udaipur 102, Nashik red.

Himachal Pradesh

Amount of rainfall received over Himachal Pradesh is 565.5 mm (-27% deficit) during 01 June 2020 - 08 October 2020. The extended range weather forecast provided for next two weeks (09 - 15 October and 16 - 22 October 2020) on rainfall over Himachal Pradesh is below normal for week-1 and above normal for week-2.

- Farmers are advised to maintain room temperature of 18-22°C and relative humidity around 85% for successful cultivation of mushrooms.
- Present weather is congenial for the attack of pink eye disease in newly born calves. It is advised to prepare the solution of 1% boric acid in boiled water and wash eyes at regular interval of three hours.

Gujarat

Amount of rainfall received over Gujarat is 1035.6 mm (11% excess) during 01 June 2020 - 08 October 2020. The extended range weather forecast provided for next two weeks (09 - 15 October and 16 - 22 October 2020) on rainfall over Gujarat is above normal for week-1 and week-2.

- Regular monitoring for fruit borer and shoot borer is advised in brinjal crop. To control, it is advised to install pheromone trap @ 4-6 per acre or in heavy incidence, spray Chlorphrifos 50 EC 20 ml or Emamectin benzoate 5 SG 3 g or Thiodicarb 50 WP 10 g in 10 litres water.
- Under prevailing weather condition, there is a chance of leaf miner infestation in castor leaves. To control, it is advised to spray Monocrotophos @ 10 ml or Dichlorovos 5 ml in 10 liters of water.

Bihar

Amount of rainfall received over Bihar is 1301.2 mm (24% excess) during 01 June 2020 - 08 October 2020. The extended range weather forecast provided for next two weeks (09 - 15 October and 16 - 22 October 2020) on rainfall over Bihar is above normal for week-1 and week-2.

- Monitoring of khaira disease is advised in late transplanted paddy. If symptoms occur, spray zinc sulphate @ 5.0 kg mixed with lime @ 2.5 kg in 500 liters of water per ha.
- Under present weather condition, transplanting of mid duration cauliflower is advised. Recommended varieties are Pusa aghani, Pusi, Patna men, Pusa synthetic-1, Pusa shubhra, Pusa sarad, Pusa medhna, Kaasi kuwari, and early snowball.

Punjab

Amount of rainfall received over Punjab is 391.7 mm (-17% deficit) during 01 June 2020 - 08 October 2020. The extended range weather forecast provided for next two weeks (09 - 15 October and 16 - 22 October 2020) on rainfall over Punjab is below normal for week-1 and above normal for week-2.

- Under dry weather condition, farmers are advised for picking of cotton.
- Present weather condition is congenial for sowing of late season cauliflower, carrot, broccoli, chinese cabbage, spinach and early varieties of potato.
- For the management of mango malformation, it is advised to prune and destroy the malformed shoots of mango tree and spray of Napthalene Acetic Acid @ 100 g + 100-150 ml alcohol in 500 liters of water per acre.

Chhattisgarh

Amount of rainfall received over Chhattisgarh is 1281.4 mm (10% excess) during 01 June 2020 - 08 October 2020. The extended range weather forecast provided for next two weeks (09 - 15 October and 16 - 22 October 2020) on rainfall over Chhattisgarh is above normal for week-1 and week-2.

- Due to the chances of rainfall, farmers are advised to continuously monitor yellow stem borer in rice field. If infestation found, spray Fipronil 5% SC @ 1 litre per ha.
- Under prevailing weather condition, sowing of winter vegetables like early varieties of cauliflower, cabbage and knol khol in nursery is advised.

Madhya Pradesh

Amount of rainfall received over Madhya Pradesh is 1048.6 mm (-2% deficit) during 01 June 2020 - 08 October 2020. The extended range weather forecast provided for next two weeks 09 - 15 October and 16 - 22 October 2020) on rainfall over Madhya Pradesh is above normal for week-1 and week-2.

- Under prevailing weather condition, field preparation for sowing of mustard, toria and ageti garden pea is advised.

Uttarakhand

Amount of rainfall received over Uttarakhand is 943.2 mm (-21% deficit) during 01 June 2020 - 08 October 2020. The extended range weather forecast provided for next two weeks (09 - 15 October and

16 - 22 October 2020) on rainfall over Uttarakhand is below normal for week-1 and above normal for week-2.

- Under prevailing weather condition, farmers are advised for field preparation for early sowing of wheat and mustard in high altitudes.
- After the withdrawn of monsoon, farmers are advised to vaccinate the cattle against Foot & Mouth Disease.

West Bengal

Amount of rainfall received over West Bengal is 1112.4 mm (-10% deficit) during 01 June 2020 - 08 October 2020. The extended range weather forecast provided for next two weeks (09 - 15 October and 16 - 22 October 2020) on rainfall over West Bengal is normal for week-1 and above normal for week-2.

- Prevailing temperature and humid weather condition are congenial for the spread of thrips and mites. To control, it is advised to spray Diafenthuron @ 0.75g per litre of water at 7-10 days interval.
- Due to expected light rainfall, there is a chance of attack of brown plant hopper. To control, it is advised to apply 0.75 ml Nuvan or Vapona per litre of water or dusting of Quinolphos 1.5% at the lower portion of the stem.

Jharkhand

Amount of rainfall received over Jharkhand is 943.1 mm (-14% deficit) during 01 June 2020 - 08 October 2020. The extended range weather forecast provided for next two weeks (09 - 15 October and 16 - 22 October 2020) on rainfall over Jharkhand is above normal for week-1 and week-2.

- Prevailing weather condition is congenial for cultivation of potato. Recommended varieties viz., Kufari Ashoka, Pukhraj, Kanchan, Pushkar, Lalima.
- Due to the chances of rainfall, land preparation is advised for the sowing of vegetable pea. Recommended varieties are Arkel, Azad pea, Pusa Pragati, Kashi Nandini, PM - 113

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