



National Agromet Advisory Service Bulletin
Based on
Extended Range Weather Forecast (ERFS)

Validity: 08 to 21 February 2019

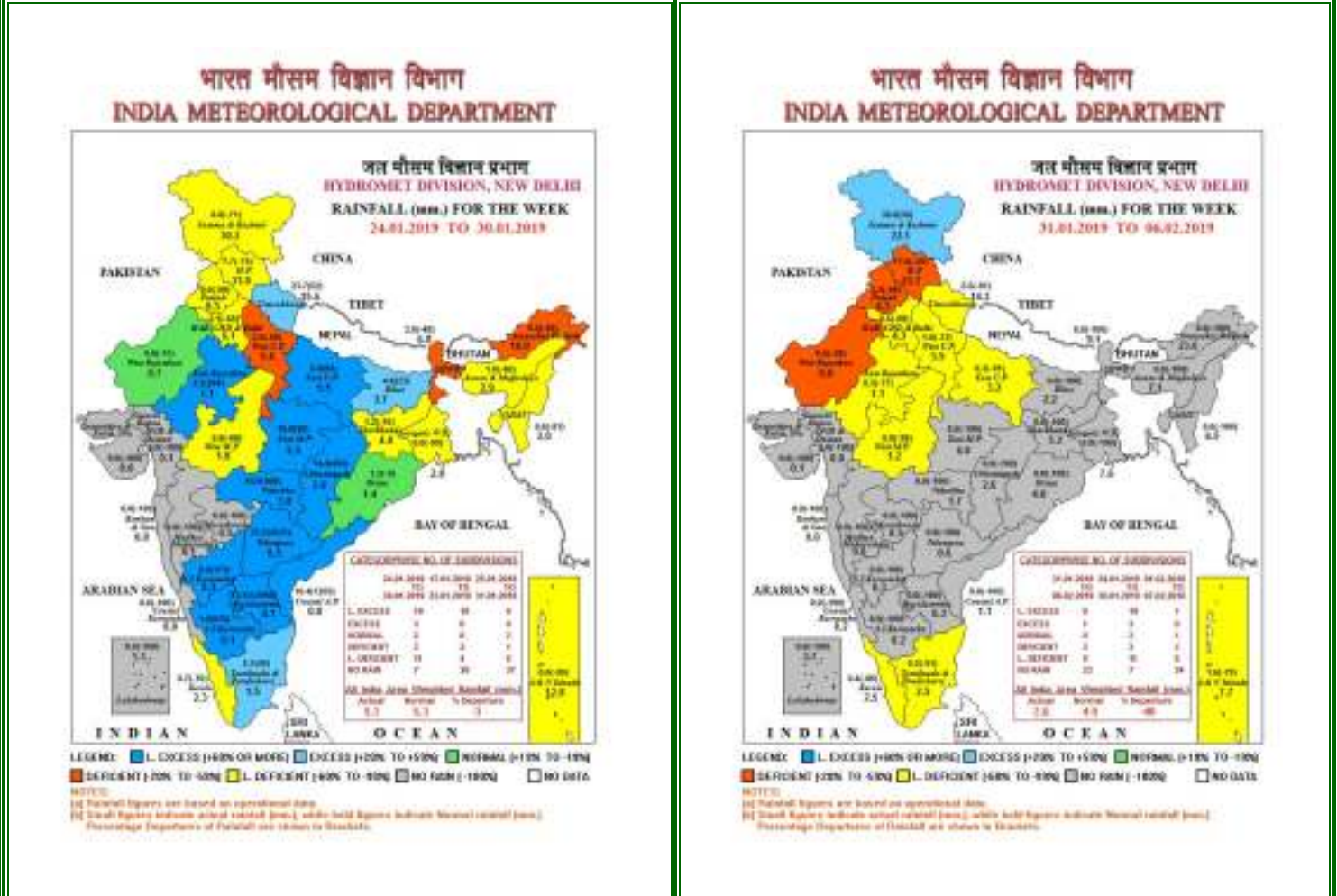
Date of issue: 08 February 2019

Issued by
Indian Council of Agricultural Research (ICAR)
All India Coordinated Research Project on Agricultural Meteorology (AICRPAM),
Central Research Institute for Dryland Agriculture (CRIDA), Hyderabad.
&
Earth System Science Organization
India Meteorological Department

Realized Rainfall and Extended Range Forecast (Rainfall and Temperatures)

Realized Rainfall

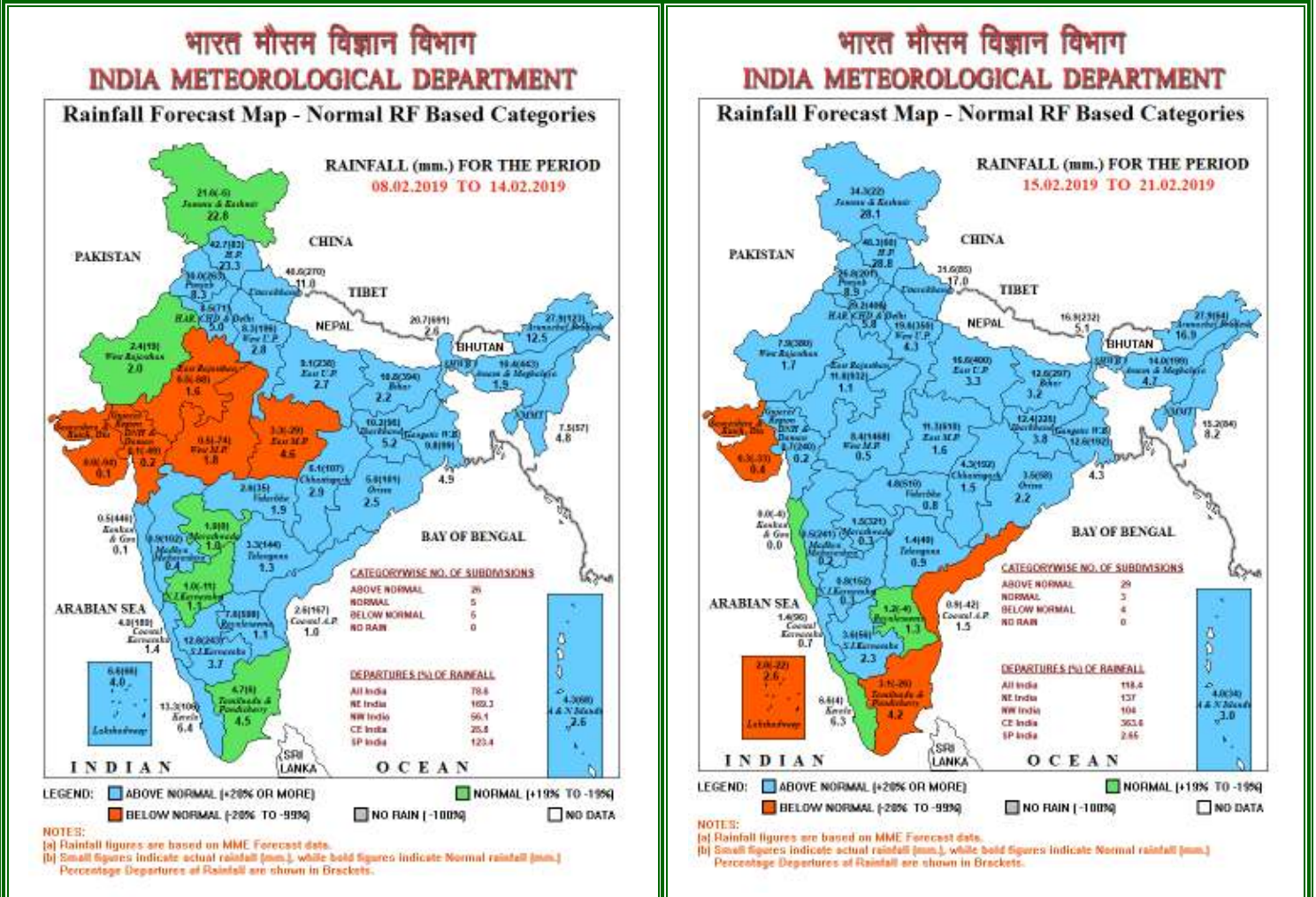
(24th January to 6th February 2019)



- Normal or above normal rainfall occurred in either of the two weeks in Jammu & Kashmir, Himachal Pradesh, East Uttar Pradesh, Rajasthan, Bihar, Odisha, Chhattisgarh, East Madhya Pradesh, Vidarbha, South Interior Karnataka, North Interior Karnataka, Andhra Pradesh, Rayalaseema and Tamil Nadu.
- Below normal rainfall / no rain occurred over rest of the country.

Extended Range Forecast System

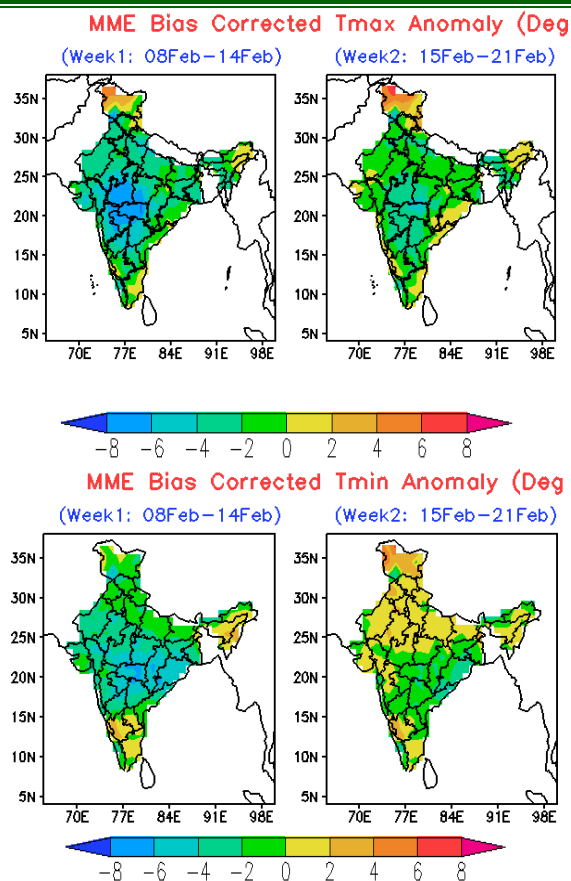
Rainfall forecast maps for the next 2 weeks (IC – 6 February) (8th to 21st February 2019)



Extended Range Rainfall Forecast

- **Week 1 (08.02.2019 to 14.02.2019) and Week 2 (15.02.2019 to 21.02.2019):** Rainfall associated with Western Disturbance over extreme north India and adjoining eastern parts (Uttarakhand, Uttar Pradesh, Bihar and north-east metsubdivisions). Southern part of Bay of Bengal, Srilanka and adjoining Tamil Nadu will be active during the period. Mostly above normal rainfall during the period.

**Maximum and Minimum temperature anomaly ($^{\circ}\text{C}$) forecast
for next 2 weeks (IC – 6 February)
(8th to 21st February 2019)**



Maximum Temperature (Tmax)

- **Week 1 (08.02.2019 to 14.02.2019) and Week 2 (15.02.2019 to 21.02.2019):** Except isolated regions over extreme north India, eastern coastal belts and north east India, Tmax will be below normal over India with higher negative anomaly over central and northwest India during week 1.

Minimum Temperature (Tmin)

- **Week 1 (08.02.2019 to 14.02.2019):** Mostly below normal Tmin over the country except some parts of northeast India and parts of south peninsula. (Thus the cold condition will continue till 3rd week of February).
- **Week 2 (15.02.2019 to 21.02.2019):** Mostly warming (positive anomaly) over northwest India, north India and adjoining central India and northeast India. Slight negative anomaly will persist over eastern coastal belt and adjoining central India.

Strategic Agricultural Planning based on rainfall during next two weeks till 21st February 2019

Agromet Advisories

Kerala

Amount of rainfall received during the period from 01 January to 07 February 2019 over Kerala is 1 mm (90% deficit). The extended range weather forecast provided for next two weeks (08 to 14 and 15 to 21 February) is above normal for week-1 and normal for week-2.

- Provide shade for young plants of Rubber. Paint lime or china clay up to branches in 2-4 year old plants. Apply Bordeaux paste or china clay to the tapping panel when tapping is stopped.
- Destroy the affected leafs along with the Spodoptera in Banana. If Spodoptera attack is severe, spray quinalphos 2ml per one litre of water or chlorantraniliprole 3 ml per 10 litre of water.
- White powdery spots are seen on the leaves of cucurbitaceous vegetables. If any fruits are present, harvest them. Then apply 1.5 ml tebuconazole or 0.5 ml difenoconazole per one litre of water.

Karnataka

Amount of rainfall received during the period from 01 January to 07 February 2019 over North Interior Karnataka is 0.8 mm (66 % deficit), over South Interior Karnataka is 1.2 mm (19% deficit) and no rain over Coastal Karnataka. The extended range weather forecast provided for 08 to 14 and 15 to 21 February over North Interior Karnataka is normal for week-1 and above normal for week-2, over South Interior Karnataka and coastal Karnataka is above normal for both the weeks.

South Interior Karnataka

- Due to continuous dry spell since October month, the termite attack is common in horticulture and Forestry tree and shrubs hence control to apply Aldrin termiticides for control of termites.
- Right time for harvesting of kharif crops like Maize and Redgram etc. cleaning, drying and storage of crops. If Ragi crop already harvested the straw may be collected and stacked.
- To protect the pulse grains from storage pests apply oils of Castor/ linseed/honge/neem oil @ 3-5 ml per kg of grains.

Tamil Nadu

Amount of rainfall received during the period of 01 January to 07 February 2019 over Tamil Nadu is 2.3 (88% deficit). The extended range weather forecast provided for next two weeks (08 to 14 and 15 to 21 February) is normal for week-1 and below normal for week-2.

- Prevailing weather condition is favorable for Leafhopper, Mealy bug and stem weevil incidence in cotton. So to control sucking pest, spray Imidacloprid 200 SL 100 ml/ha or Fipronil 5%SC 1500-2000 ml/ha. To control mealy bug incidence spray NSKE 5% and for stem weevil incidence, spray Carbaryl 50 WP 2.5 kg/ha (or) Carbofuran 3G 33.3 kg/ha.
- Climatic condition is favourable for Thrips and Mite infestation in chilli. To control thrips, spray Imidacloprid 17.8 % SL 3.0 ml/10 lit or Emamectin benzoate 5 % SG 4 g/10 lit. Dimethoate 30% EC @ 1.0 ml/litRE or Quinalphos 25% EC @ 1.5 ml/lit has to be sprayed to control mite infestation.
- The expected weather having low cloud cover and moderate to high humidity are conducive for the incidence of head borer in sunflower. To control the pest, spray 5% Neem oil or 5% Neem Seed Kernel extract before egg laying.

Maharashtra

No rainfall received during 01 January to 07 February 2019 over different meteorological sub divisions of the state viz., Konkan, Madhya Maharashtra and Marathwada. Amount of rainfall received over Vidarbha is 10.9 mm (4% deficit). The extended range weather forecast provided for next two weeks (08 to 14 and 15 to 21 February) over Konkan is above normal for week-1 and normal for week-2, Madhya Maharashtra and Vidarbha is above normal for both the weeks, over Marathwada is normal for week-1 and above normal for week-2.

Marathwada

- For management of aphids in late sown rabi sorghum, spray of Dimethoate 30 EC@ 200 ml per acre.
- For management of fall armyworms in late sown maize, spray Thiamethoxam 12.6 % + Lambda cyhalothrin 9.5 % @ 50 ml per acre
- Take a spray of Dimethoate 30 % @ 1320 ml per acre during flowering stage of mango to control Jassids in mango crop.
- Take up a spray to control powdery mildew disease in grape orchard and harvesting of mature fruits should be done.

Madhya Maharashtra

- To control powdery mildew & mango hoppers on bloomed mango spray Imidacloprid (17.8 SL) 3- 4 ml + Sulphur 80 WP 25 gram per 10 litre water.
- Give protective irrigation to drumstick and use crop residue for mulching to conserve soil moisture.
- Rabi sorghum is at harvesting stage so it should be harvested, threshed & store (moisture should not more than 10%) it after 2-3 sun drying by mixing it with 1-2 % dried neem leaf.

Vidarbha

- For control of aphids in wheat, take up spray of dimethoate 30 EC @ 500 ml OR methyl demeton 25 EC @ 400 ml in 500 litres of water.
- Sowing of summer groundnut (TAG 24, SB-11) should be completed up to first week of February. Seed should be treatment with Trichoderma 6g/kg seed and, rhizobium and PSB (each 250g / 10-15 kg seed) is advisable. Broad bed furrow (BBF) sowing with sprinkler irrigation is advisable for summer groundnut.
- Summer sesame (AKT 101, PKV-NT-11), should be completed up to first fortnight of February and seed treatment with Thiram or Carbendazim @ 3 g /kg seed and biofungicide Trichoderma viride @ 4 g/kg seed is advisable.
- Recommended varieties for cultivation of watermelon during this period include Asahi Yamato, Sugar baby, Arka Manik and Pusa bedana. Recommended muskmelon varieties are Pusa Sharbati, Pusa Madhuras, Hara Madhu.
- Vaccination of susceptible farm animals against foot-and-mouth disease (FMD) is advisable.
- For summer green fodder purpose sowing of fodder crops of maize (African tall) or sorghum (Pusa-Chari, MP-Chari and SSG898) can be undertaken during this time.

Chhattisgarh

Amount of rainfall received over Chhattisgarh during 01 January to 07 February 2019 is 15 mm (17% excess). The extended range weather forecast provided for next two weeks (08 to 14 and 15 to 21 February) is above normal for both the weeks.

- To control broad leaved weeds in late sown wheat apply Metasulfuron @ 8 grams +200 litre water at 20-25 day after sowing or spray 2,4-D Na Salt 500 gm per acre. +200 liter water at 25-30 day after sowing.
- To control attack of insect pests apply Spynosad @60 ml per acre dissolved in 200 liter water in field-pea crop.
- Flowering in mango crop has started. Therefore at 50% flowering, irrigation should be given strictly at an interval of 15 days. More frequent irrigation leads to conversion of flower to vegetative phase.

Uttar Pradesh

Amount of rainfall received over East Uttar Pradesh region is 11.9 mm (39% deficit) and West Uttar Pradesh is 16.6 mm (22% deficit) during 01 January to 07 February 2019. The extended range weather forecast provided for two weeks (08 to 14 and 15 to 21 February) for West and East Uttar Pradesh is above normal for both the weeks.

- In Barley crop, top dress 30 kg/ha Urea in rain-fed areas at optimum moisture condition.
- Farmers are advised to Protect Pea and chickpea from Pod borer and Semi lopper, spray Fenvalerate 0.4% DP 20-25 kg/ha or Quinalphos 20% EC 2.0 litre/ha or Malathion 50 % Ec 2.0 litre/ha with 500 to 600 litre water on clear sky.
- Aphids can attack mustard crop. If seen, spray Chlorpyriphos 20% EC @ 1.0 litre/ha or monochrotophos 36 % S.L. @ 500 ml/ha with 500-600 litre of water solution on clear sky.

West Bengal

No rainfall received over Gangetic West Bengal during 01 January to 07 February 2019. The extended range weather forecast provided for next two weeks (08 to 14 and 15 to 21 February) is above normal for both the weeks.

- Start transplanting boro rice at 20 x 15 cm spacing. Ensure 5 cm standing water in the field during transplanting. If the soil is zinc deficient, then apply 2 kg zinc sulphate per bigha of land.
- In this weather condition, occurrence of late blight in Potato is being reported from many areas. Farmers are advised to keep a close observation. As a control spray, Blitox or Mancozeb @2.5 g/litre of water at an interval of 5-7 days, thrice.

Jharkhand

Amount of rainfall received over Jharkhand during 01 January to 07 February 2019 is 1.2 mm (94 %

deficit). The extended range weather forecast provided for next two weeks (08 to 14 and 15 to 21 February) is above normal for both the weeks.

- To cultivate summer vegetables, specially cucurbitaceous plant like sponge gourd, Bottle gourd, pumpkin, water melon, musk melon etc. may sow the seeds of these vegetables in pit and maintain the distance between two pits according to the nature of the plant.
- Farmers having 21 days old seedlings of summer rice may start transplanting. Before transplanting, field may be ploughed repeatedly (for puddling) and apply 18 kg D.A.P., 11 kg Urea and 14 kg Murate of Potash per acre at the time of final preparation of the field.
- Farmers wishing to cultivate mung crop may select improved variety of mung S.M.L.- 668 and sow the seed @ 12 kg per acre.

Rajasthan

Amount of rainfall received over West Rajasthan is 5.7 mm (64% excess) and over East Rajasthan is 6.1 mm (3 % deficit) during 01 January to 07 February 2019. The extended range weather forecast provided for next two weeks (08 to 14 and 15 to 21 February) for West Rajasthan is normal for week-1 and above normal for week-2 and East Rajasthan is below normal for week-1 and above normal for week-2.

- For the control of gram pod borer at 50% flowering stage, spray of NPV 250 LE 1 ml /litre water and second spray at 15 days BTK Dipel 8L 1.5 litre/ha is recommended.
- Top dressing of 1/4th of nitrogen (65 kg Urea) in opium poppy at flowering stage and spray Ridomil @3g/litre of water to control downy mildew.
- For the control of rust diseases in wheat, apply 25 kg/ha sulphur dust or spray mancozeb 2 kg/ha at 15 days interval for 2 to 3 times. The spray or dusting must be done in the morning or evening time.
- Harvest the mustard crop wherever it has reached maturity stage and store at safe place.
- Apply light irrigation in cumin and follow the plant protection in cumin growing region of Rajasthan.

Assam

Rainfall received over Assam is 2.4 mm (90% deficit) during 01 January to 07 February 2019. The extended range weather forecast provided for next two weeks (08 to 14 and 15 to 21 February) is above normal for both the weeks.

- Farmers are advised to prepare land for growing green gram & black gram crop. Sandy loam soil is more preferable. Collect recommended varieties viz.T9, Pant U 19, UG 157 etc. for black gram and Kopergaon, Pratap, AAU 39 etc. for green gram cultivation.
- Farmers are advised to go for irrigation in the onion crop at 7 days interval. Against downy mildew disease farmers are advised to spray Ridomil @ 2.5gm/litre at an interval of 10 days.
- Land preparation may be started for growing of ridge and sponge gourd. Early sowing helps in escaping fruit fly attack. Select recommended varieties viz. AAUJ-1, AAUJ-2, AAUJ-3 etc. for ridge gourd and Pusa Chikni or other local varieties for sponge gourd.
- As the water level of ponds are going down, the fishery owners may arrange for partial harvesting of marketable sized fish (>700gm).

Haryana

Rainfall received over Haryana is 15.7 mm rainfall (26% deficit) during 01 January to 07 February 2019.

The extended range weather forecast provided for next two weeks (08 to 14 and 15 to 21 February) is above normal for both the weeks.

- In Mustard, Wheat, Gram, Barley and Vegetable crops due to Western Disturbances, farmers are advised to temporarily withhold irrigation and chemical spray till 8th February.
- Farmers are advised to keep on vigilance for insect/pests in sugarcane crop.
- Due to fall in night temperature, high winds and cloudy conditions keep the animals under shed. Keep proper arrangement to keep warm in shed. Provide 50 grams iodized salt and 50 to 100 grams mineral mixture daily with animal feed/fodder to keep them healthy. Put curtain on windows of poultry house to keep inside warm during night.

Punjab

Rainfall received over Punjab is 31.1 mm rainfall (4% excess) during 01 January to 07 February 2019. The extended range weather forecast provided for next two weeks (08 to 14 and 15 to 21 February) is above normal for both the weeks.

- If wheat crop show deficiency of sulphur, broadcast 100 kg of Gypsum/acre and irrigate the field.
- If yellowing of leaves appear due to manganese deficiency in wheat crop, spray manganese sulphate.
- Farmers are advised to protect the fruit plants particularly young ones from low temperature.
- It is the ideal time to plant new deciduous fruits plants such as pear, peach, plum, grapes, fig etc.

Himachal Pradesh

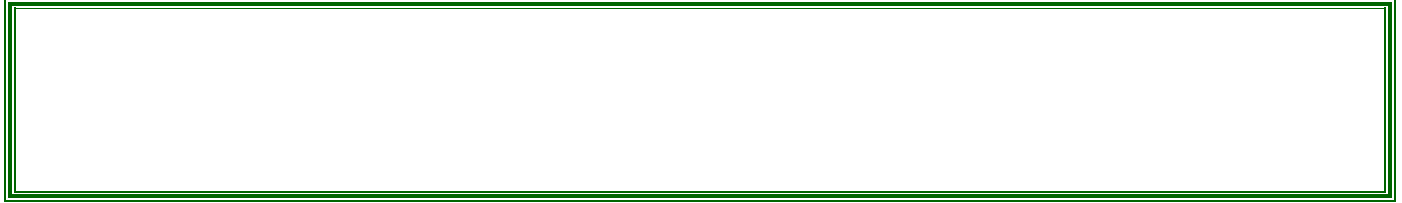
Himachal Pradesh has received 99.0 mm of rainfall during 01 January to 07 February 2019, which is 16% deficit. The extended range weather forecast provided for next two weeks (08 to 14 and 15 to 21 February) is above normal for both the weeks.

- Thinning and weeding is recommended in timely sown mustard crop.
- In vegetables (brinjal, cauliflower, cabbage, tomato etc.) for monitoring of borer insect, farmers are advised to use pheromone traps.
- Farmers are advised to complete planting of onion bulbs.
- Farmers are advised to start earthing-up in potato if crop has attained a height of 15-22 cm.
- Apply manures and fertilizers in mango and other orchard gardens. Wrapping of plastic sheets around mango trunk should be done for preventing climbing of young mealy bugs. Apply grease to seal any cracks in the polythene sheets.

Jammu

Rainfall received during 01 January to 07 February 2019 over Jammu is 165.2 mm, which is 43% excess. The extended range weather forecast provided for next two weeks (08 to 14 and 15 to 21 February) over Jammu is normal for week-1 and above normal for week-2.

- Due the presence of sufficient moisture in soil and further chances of thunder showers, farmers are advised to apply the remaining dose of urea before the spike emergence.
- Due to present rainfall and chances of further rainfall, postpone the plant protection measures.
- Keep nursery area of cucurbitaceous crop, weed free by manual and spray the crop with bavistin @ 1gm/lit during clear weather against post damping off disease.



Disclaimer: The predictability of weather depends on many factors which are dynamic in nature. The success of agromet advisories provided here depends on the accuracy of the forecasts. In no event will India Meteorological Department (IMD) and Indian Council of Agricultural Research (ICAR) be liable to the user or to any third party for any direct, indirect, incidental, consequential, special or exemplary damages or lost profit resulting from any use or misuse of the information on this bulletin.