



## National Agromet Advisory Service Bulletin

based on

**Extended Range Weather Forecast (ERFS)**

**Validity: 21 January - 03 February 2022**

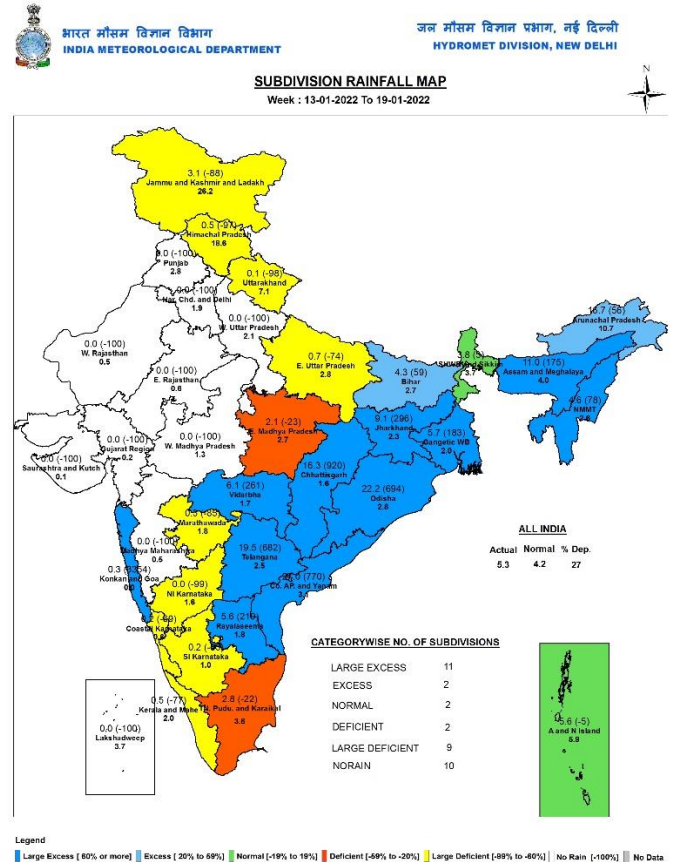
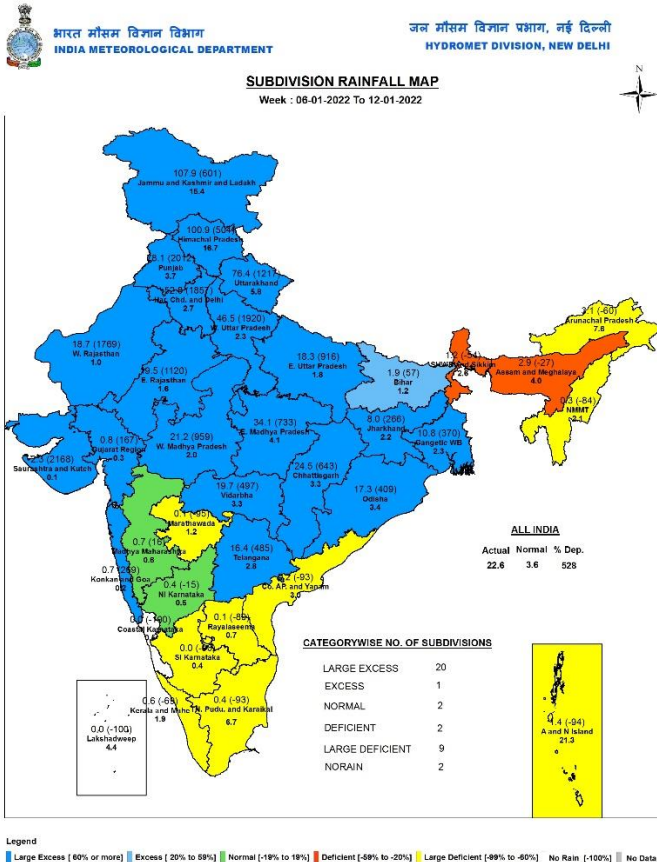
**Date of issue: 21 January 2022**

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&  
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Earth System Science Organization**

## Realized Rainfall and Extended Range Forecast (Rainfall and Temperature)

### Realized Rainfall (6<sup>th</sup> to 19<sup>th</sup> January, 2022)



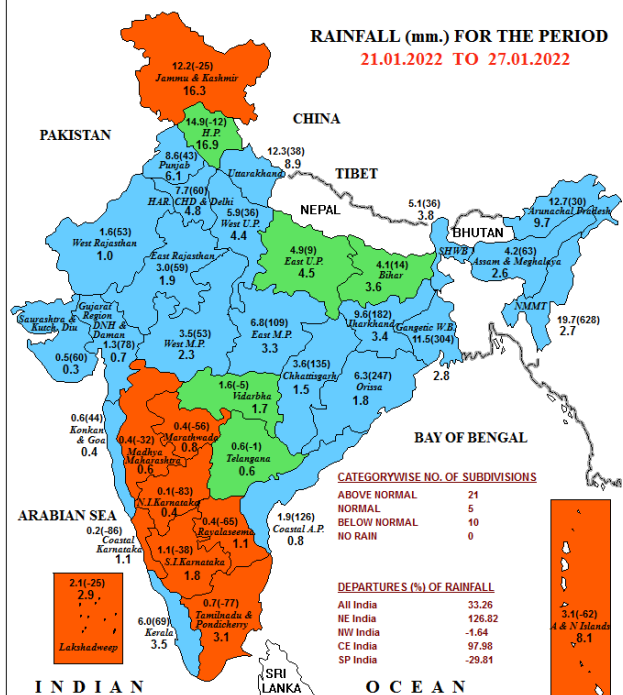
- Normal or above normal rainfall occurred in both the weeks in Bihar, Jharkhand, Odisha, Konkan & Goa, Vidarbha, Gangetic West Bengal, Telangana and Chhattisgarh.
- Normal or above normal rainfall occurred in either of the two weeks in Jammu & Kashmir and Ladakh (UTs), Himachal Pradesh, Uttarakhand,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

## Extended Range Forecast System

### Rainfall forecast maps for the next 2 weeks (IC – 19 January) (21<sup>st</sup> Jan. to 3<sup>rd</sup> Feb., 2022)

#### भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT

##### Rainfall Forecast Map - Normal RF Based Categories



#### NOTES:

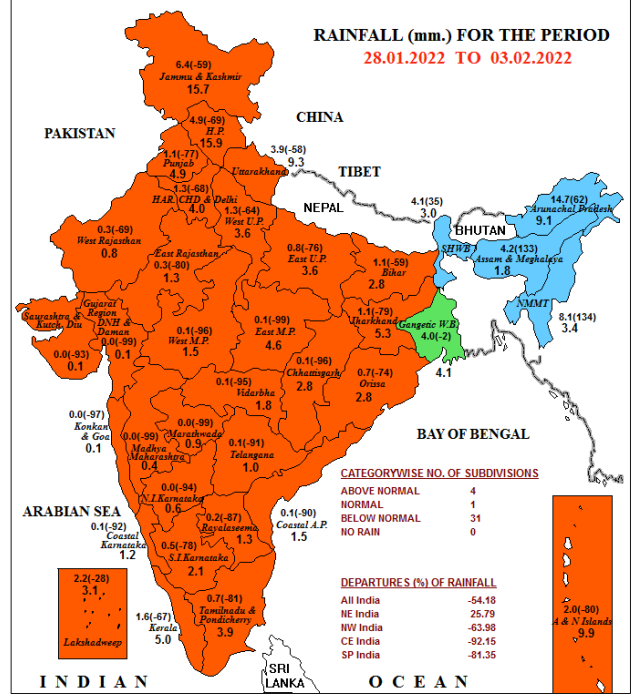
[a] Rainfall figures are based on MME Forecast data.

[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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##### Rainfall Forecast Map - Normal RF Based Categories



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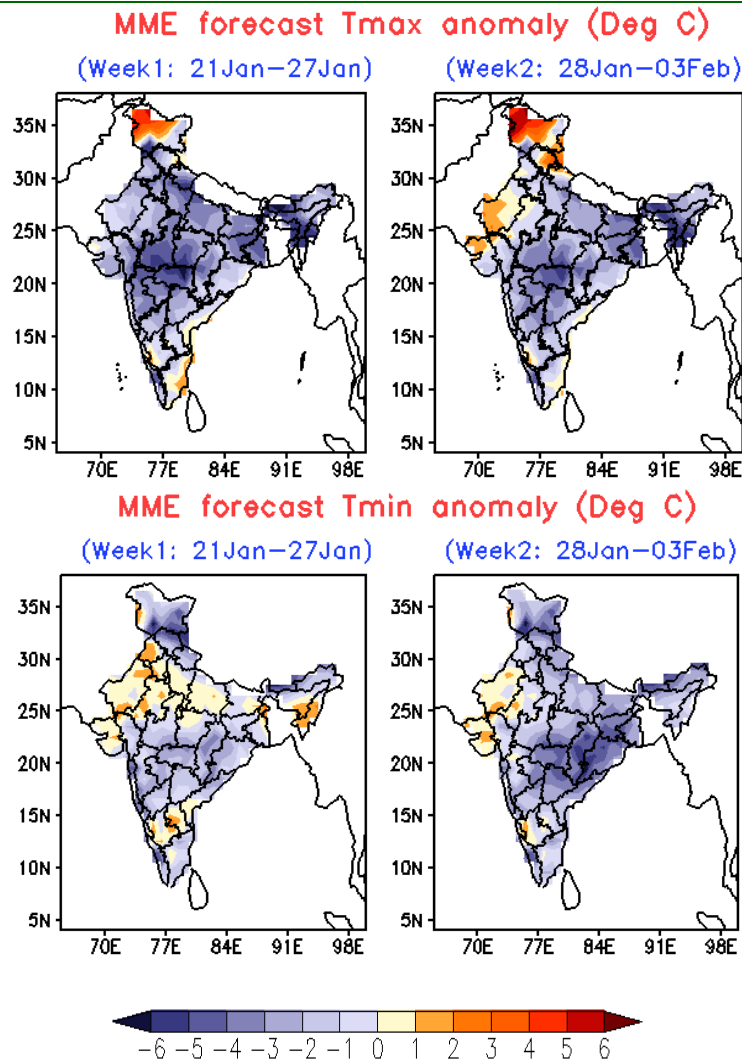
[a] Rainfall figures are based on MME Forecast data.

[b] Small figures indicate actual rainfall (mm.), while bold figures indicate Normal rainfall (mm.).

Percentage Departures of Rainfall are shown in Brackets.

- **Week 1 (21.01.2022 to 27.01.2022) and Week 2 (28.01.2022 to 03.02.2022):** Western Disturbance associated rainfall/snowfall is likely over extreme north India in week 1. Eastern parts of India (north-eastern coastal parts of Odisha, Gangetic West Bengal, Jharkhand and adjoining northeast parts of India) will be under the influence of cyclonic circulation in week 1 and likely to get rainfall.

**Maximum and Minimum temperature anomaly ( $^{\circ}\text{C}$ ) forecast  
for next 2 weeks (IC – 19 January, 2022)  
(21<sup>st</sup> Jan. to 3<sup>rd</sup> Feb., 2022)**



**Maximum Temperature (Tmax)**

- **Week 1 (21.01.2022 to 27.01.2022) and Week 2 (28.01.2022 to 03.02.2022):** Mostly below normal Tmax likely over entire India except some parts of extreme north India during week 1 and week 2 and parts of northwest India in week 2.

**Minimum Temperature (Tmin)**

- **Week 1 (21.01.2022 to 27.01.2022):** Tmin anomaly will be slightly positive over parts of northwest India in week 1, whereas the central parts of India will be with slight negative anomaly in week 1.
- **Week 2 (28.01.2022 to 03.02.2022):** More parts of India will have slight negative anomalies compared to week 1 except small parts of northwest India. Tmin over Bihar, Jharkhand, Gangetic West Bengal, Odisha and adjoining region of Madhya Pradesh, Chhattisgarh, Andhra Pradesh, Maharashtra will be with more negative anomaly.

## Strategic Agricultural Planning based on rainfall during next two weeks till 03 February 2022

### Agro-met Advisories

#### Kerala

Amount of rainfall received over Kerala is 1.6 mm (-72% large deficit) during 01 - 20 January 2022. The extended range weather forecast (rainfall) for next two weeks (21 - 27 January 2022 and 28 January - 03 February 2022) is above normal for week-1 and below normal for week-2.

- In banana plantations, if irrigation is inadequate, mulching should be practiced to retain moisture in the basins. Protect palms from heavy sun by wrapping with leaves.
- Coconut: Since the summer irrigation promotes coconut production, irrigate the palms as far as possible after one week. Adopt mulching practices to reduce the quantity of irrigation. A long-term method of mulching in the coconut farm is husk burial. The husk can be buried either in linear trenches taken 3 meters away from the trunk between rows of palms or in circular trenches taken around the palm at a distance of 2 meter from the trunk.
- Ginger: Ginger selected for seed purpose should be dried in shade for storage. For this, take pits and plaster the sides with cow dung. Seed ginger and saw dust can be spread alternatively in the pits and place wooden planks at the top with one or two small openings for aeration. Check the pits once in every 21 days for any disease infection. Care should be taken to select disease free ginger for seed purpose.

#### Tamil Nadu

Amount of rainfall received over Tamil Nadu is 32.2 mm (142% large excess) during 01 - 20 January 2022. The extended range weather forecast (rainfall) for next two weeks (21 - 27 January 2022 and 28 January - 03 February 2022) is below normal for both week-1 and week-2.

- Current weather condition is favorable for sorghum shoot fly infestation. Seed treatment with Imidacloprid 70 WS @ 10 g/kg of seeds in case of direct seeding, use increased seed rate up to 12.5 kg/per hectare and remove the shoot fly damaged seedlings at the time of thinning. Another option is to set up the TNAU low cost fish meal trap @ 12/ha till the crop is 30 days old.
- Farmers are advised to monitor fall army worm incidence (*Spodoptera frugiperda*) in maize. If symptoms are noticed, spray Azadirachtin 1 EC @ 2 ml/l (or) Thiodicarb 75 WP @ 2 g/l.
- Prevailing weather conditions is conducive for mealy bug infestation in guava and mango. If symptoms of white waxy secretions on leaves are noticed, spray Triazophos 2 ml+ Neem oil 5 ml/l or Phosalone 35 EC 1.5 ml+ Neem oil 5 ml/l.

#### Maharashtra

Rainfall received over Madhya Maharashtra is 0.7 mm (-46% deficit); Marathwada is 0.3 mm (-90% large deficit); Vidarbha is 27 mm (351% large excess) and Konkan region is 2.5 mm (517% large excess) during 01 – 20 January 2022. The extended range weather forecast (rainfall) for next two weeks (21 - 27 January 2022 and 28 January - 03 February 2022) over Konkan, Madhya Maharashtra,

Marathwada and Vidarbha is below normal for both week-1 and week-2, except over Konkan during week-1 (above normal).

#### *Madhya Maharashtra*

- For control of powdery mildew in chilli, spraying of Hexaconazole @ 10 ml per 10 litres of water is recommended.
- Protective irrigation should be given at flag leaf stage and flowering stage for getting higher yield in sorghum.
- In case of Late sown Safflower, spraying of Mancozeb + Carbendazim @ 2 gm per liter is recommended for control of blight.

#### *Konkan*

- Prevailing weather conditions favors the incidence of hoppers on flower bud to fruit stage in mango. To protect the inflorescence from pest, spray Lambda cyhalothrin 5%EC @ 6 ml per 10 liter in water during clear weather.
- To reduce fruit-drop in Alphonso mango, spray a solution of 20 ppm naphthalene acetic acid (1 gm in 50 liters of water) at pea size fruits. Naphthalene acetic acid is first dissolved in alcohol and then mixed with water.

#### *Vidarbha*

- With assured irrigation facility, sowing of summer groundnut (TAG 24) can be taken up when optimum temperature range for germination prevails (minimum temperature >15°C). Sowing of summer groundnut can normally be undertaken up to first week of February.
- To control pod borer infestation in late sown chickpea, install pheromone trap (Helilure) @ 5 nos./ ha. Place bird perches above crop canopy at regular interval in the field @ 8 to 10 /acre to attract predatory birds. For control of infestation (1 to 2 caterpillars per metre row length or 5% pod damage) undertake spray of azadirachtin 300 ppm @ 50 ml per 10 litres of water and ETL based spray of Quinalphos 25 EC 20 ml or Enamectin benzoate 5 SG @ 3 g or Chlorantraniliprole 18.5 SC @ 2.5 ml per 10 lit of water.

#### **Haryana**

Amount of rainfall received over Hisar is 53.3 mm (733% large excess) during 01 – 20 January 2022. The extended range rainfall forecast (rainfall) provided for next two weeks (21 - 27 January 2022 and 28 January - 03 February 2022) over Hisar is above normal for week-1 and below normal for week-2.

- To protect the vegetable crops from frost and low temperature, it is advised to apply need-based irrigation in evening hours during second week.



- Farmers are advised to provide 50 g iodized salt and 50 to 100 g mineral mixture daily with animal feed/fodder to keep livestock healthy.

## **Karnataka**

Rainfall received during 01 - 20 January 2022 over South Interior Karnataka is 0.5 mm (-74% large deficit) and North Interior Karnataka is 0.4 mm (-83% large deficit). The extended range weather forecast (rainfall) for next two weeks (21 - 27 January 2022 and 28 January - 03 February 2022) over South Interior Karnataka and North Interior Karnataka is below normal for both week-1 and week-2.

### *North Interior Karnataka*

- Harvesting/threshing and drying of pigeon pea and other crops, plucking of cotton and chili is advised.
- Farmers are advised to vaccinate livestock against Foot and Mouth disease (FMD vaccination), Black Quarter disease (BC vaccination) and *Haemorrhagic Septicaemia*. Vaccinate (ET vaccine) sheep and goats against Enterotoxemia.

## **Uttar Pradesh**

Rainfall received during 01 - 20 January 2022 over East Uttar Pradesh is 20 mm (222% large excess) and West Uttar Pradesh is 47 mm (662% large excess). The extended range weather forecast (rainfall) for next two weeks (21 - 27 January 2022 and 28 January - 03 February 2022) over both East Uttar Pradesh and West Uttar Pradesh is normal for week-1 and below normal week-2.

### *Western Uttar Pradesh*

- Sulfosulfuron 75% wp @ 33g/ha + metsulfuron-methyl 20% wp@ 4 g/ha in 300 litres of water solution is to be applied after 24 January for controlling mixed weed flora.
- Spray 2% potash solution in pea to protect the crop from frost.
- Balanced ration should be given to animals to maintain regularity of milk production. Balanced ration should be prepared with 40% grain (Maize/wheat/sorghum etc.), 30% wheat bran, 27% mustard cake, 1% common salt, 1% chalk (khadia) and 1% mineral mixture.

## **Jammu**

Amount of rainfall received over Jammu is 131 mm (162% large excess) during 01 - 20 January 2022. The extended range weather forecast (rainfall) provided for next two weeks (21 - 27 January 2022 and 28 January - 03 February 2022) over Jammu is below normal for both week-1 and week-2.

- Harvest cole crops at appropriate time and select best plants for seed production of knol khol and cauliflower.
- Make field weed free and spray mancozeb @ 2.5gm/ltr in onion /garlic to avoid fungal incidence.
- In Chrysanthemum pruning of old shoots and grooming of mother plants is recommended.

## Assam

Amount of rainfall received over Assam is 13 mm (42% excess) during 01 - 20 January 2022. The extended range weather forecast (rainfall) provided for next two weeks (21 - 27 January 2022 and 28 January - 03 February 2022) over Assam is above normal for both week-1 and week-2.

- Transplanting of *Boro* varieties like *Jyotiprasad*, *Bishnuprasad*, *Kanaklata*, *Dinanath Joymoti* etc. are suggested to complete within this month. Seedlings with 4-5 leaves are suitable for transplanting.
- Incidence of fungal wilt disease has been observed in tomato crop. Farmers were advised to drench the soil with Saaf @ 2.5 g/lit of water for control the disease.
- Vaccinate the 1 month old ducklings with cholera vaccine in order to immunize them against avian cholera. Install gunny bags or plastic sheath curtains on the side walls of shed to reduce wind chilling effect. Care should be taken not to restrict ventilation.

## Chhattisgarh

Amount of rainfall received over Chhattisgarh is 41 mm (590% large excess) during 01 - 20 January 2022. The extended range weather forecast (rainfall) provided for next two weeks (21 - 27 January 2022 and 28 January - 03 February 2022) over Chhattisgarh is above normal for week-1 and below normal for week-2.

- Due to the forecast of rainfall in coming week, farmers are advised to make proper arrangements for drainage in the vegetable crops.
- For the management of aphid insect in mustard crop, it is advised to spray Imidacloprid 17.8 SL @ 250 ml per hectare, 2 to 3 times at an interval of 10-15 days as required.
- If downy mildew disease is observed in mustard, spray Metalaxyl @ 1 gm per litre of water. If necessary, spraying should be repeated after 10-12 days.

## Gujarat

Amount of rainfall received over Gujarat region is 0.8 mm (14% higher) during 01 - 20 January 2022. The extended range weather forecast (rainfall) provided for next two weeks (21 - 27 January 2022 and 28 January - 03 February 2022) over Gujarat is above normal for week-1 and below normal for week-2.

- Carry out tobacco topping at flower bud initiation stage at 24 leaves. Remove tobacco suckers regularly or spray Pendimethalin 30 EC (Stomp) 150 ml + 200 g Urea in 10 liter of water after removal of suckers during week-2. Spray insecticides like Methyl o Demeton 25 EC or Dimethoate 30 EC 15 ml in 10 liter of water after well mixing.
- Remove dried and diseased indicted leaves of banana and spray Mancozeb 75 WP 27 g or Propiconazole 25 EC 5 ml in 10 liter of water at an intervals of 15 days to control sigatoka disease. De-suckering to be done regularly around main banana plant in the field is advised.



### **Himachal Pradesh**

Amount of rainfall received over Himachal Pradesh is 116 mm (168% large excess) during 01 - 20 January 2022. The extended range weather forecast (rainfall) provided for next two weeks (21 - 27 January 2022 and 28 January - 03 February 2022) over Himachal Pradesh is normal for week-1 and below normal for week-2.

- Apply recommended herbicides for controlling weeds in wheat on clear sky. The optimum stage of herbicide spray is when the weeds are at 2 – 3 leaf stage. Application of clodinafop + metsulfuron is recommended.
- Maintain room temperature 25 - 28°C and relative humidity around 80 - 85% for successful cultivation of mushrooms. Sprinkle water to maintain humidity but ensure air circulation by fans to prevent water retention on mushroom.

### **West Bengal**

Rainfall received during 01 - 20 January 2022 over Gangetic West Bengal is 17 mm (154% large excess) and Sub-Himalayan West Bengal is 5 mm (-44% deficit). The extended range weather forecast (rainfall) provided for next two weeks (21 - 27 January 2022 and 28 January - 03 February 2022) over Gangetic West Bengal is above normal for week-1 normal for week-2.

- For preventive measure of late blight in potato spraying of Mancozeb or Chlorothalonil or Copper Oxychloride will be useful.
- Lentil: To control rust, apply chlorothalonil

### **Uttarakhand**

Amount of rainfall received over Uttarakhand is 78 mm (346% large excess) during 01 - 20 January 2022. The extended range weather forecast (rainfall) provided for next two weeks (21 - 27 January 2022 and 28 January - 03 February 2022) over Uttarakhand is above normal for week-1 and below normal for week-2.

- In view of ground frost, it is advised to protect the vulnerable crops from frost damage by mulching between rows in crops like potato, garlic etc.
- To save the animals from the cold, proper arrangement in the animal shed is advised and feed them optimum quantity of mustard oil & jaggery for maintain body temperature and also provide lukewarm water for drinking.
- Feed mineral mixture regularly. Take deworming in consultation with a veterinarian and get vaccination to control pneumonia.

## **Punjab**

Amount of rainfall received over Punjab is 80 mm (865% large excess) during 01 - 20 January 2022. The extended range weather forecast (rainfall) provided for next two weeks (21 - 27 January 2022 and 28 January - 03 February 2022) over Punjab is above normal for week-1 and below normal for week-2.

- For management of army worm in wheat, spray Coragen 18.5 SC (chlorantraniliprole) @ 40 ml/ac in 80-100 litres of water per acre in the evening.
- To protect potato from late blight, spray Indofil M-45/Mass M-45/Markzeb/Antracol/ Kavach @ 500- 700 g or Copper Oxychloride 50 WP/Mark copper @ 750- 1000 g/acre in 250- 350 litres of water after weather clears up.
- Green fodder should be given 40-50 Kg per animal per day. This will reduce the cost incurred by the dairy farmer on feed as feed alone accounts for 65-70 % of the cost required for dairy farm.

## **Madhya Pradesh**

Amount of rainfall received over East Madhya Pradesh is 36 mm (307% large excess) during 01 - 20 January 2022. The extended range weather forecast (rainfall) provided for next two weeks (21 - 27 January 2022 and 28 January - 03 February 2022) over Madhya Pradesh is above normal for week-1 and below normal for week-2.

- Second cut of berseem fodder is recommended. This should be followed by irrigation and urea application.
- In lentil and chickpea, monitor the field for pod borer in the field.

## **Andhra Pradesh**

Amount of rainfall received over coastal Andhra Pradesh is 28 mm (224% large excess) and Rayalaseema is 9 mm (188% large excess) during 1-20 January 2022. The extended range weather forecast (rainfall) provided for next two weeks (21 - 27 January 2022 and 28 January - 03 February 2022) is below normal over costal AP and Rayalaseema for both week- and week-2, except over costal AP during week-1 (above normal).

- In Ananthapuramu, Kurnool and Kadapa districts, present weather conditions are favourable for tikka leaf spot incidence in groundnut. To control the tikka leaf spot, farmers are advised to spray, Mancozeb @ 2 g + Carbendazim @ 1 g or Hexaconazole @ 2 ml/L of water.
- In Nellore, Chittoor, Prakasam, Kadapa, Ananthapuramu, Srikakulam, Krishna, Visakhapatnam and Kurnool districts, present weather conditions are favourable for the incidence of spotted borer and helicoverpa in redgram. To control the pest, spraying of Thiodicarb @ 1 g or Novaluron @ 1 ml or Spinosad @ 0.3 ml /L of water is recommended.
- Prevailing weather conditions are favourable for collar rot and helicoverpa incidence in chickpea

grown in Ananthapuramu, Kurnool districts. To control collar rot, farmers are advised to drench soil with Carbendazim @ 1 g or Mancozeb @ 3 g /L of water and to control helicoverpa spraying of Quinalphos @ 2.0 ml or Thiodicarb @ 1.0 g or Novaluron @ 1 ml/L of water is recommended

- The present weather conditions are favourable for incidence of pink boll worm in cotton grown in Srikakulam, Prakasam, Guntur, Krishna, Ananthapuram, YSR Kadapa, and Kurnool districts. To control the pest, spraying of Profenophos @ 2ml/L or Thiodicarb 1.5g/ L of water is recommended.

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