



# National Agromet Advisory Service Bulletin based on

**Extended Range Weather Forecast (ERFS)** 

Validity: 24 July- 06 August 2020

Date of issue: 24 July 2020

# Issued by

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

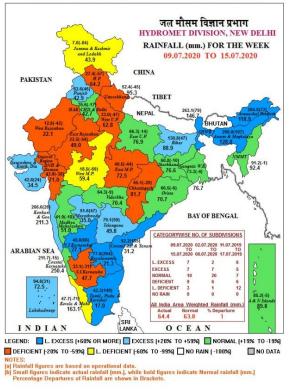
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India Meteorological Department (IMD)
Earth System Science Organization

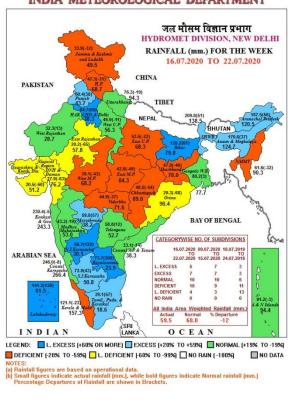
# Realized Rainfall and Extended Range Forecast (Rainfall and Temperatures)

# Realized Rainfall (9<sup>th</sup> to 22<sup>nd</sup> July, 2020)





# भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT

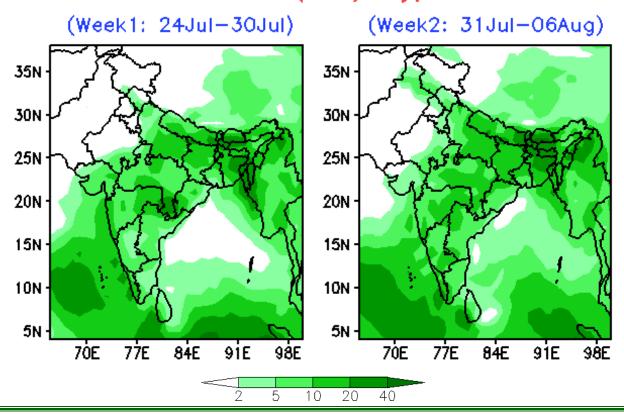


- Normal or above normal rainfall occurred in both the weeks in Punjab, Haryana Chandigarh & Delhi, Bihar, West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Konkan & Goa, Madhya Maharashtra, Marathwada, Coastal Karnataka, North Interior Karnataka, Andhra Pradesh & Yanam, Telangana, Tamil Nadu, Puducherry & Karaikal, Lakshadweep and Andaman & Nicobar Islands.
- Normal or above normal rainfall occurred in either of the weeks in Uttar Pradesh, Uttarakhand, West Rajasthan, Saurashtra & Kutch, Vidarbha, Jharkhand, Odisha, Nagaland, Manipur, Mizoram & Tripura (NMMT) and South Interior Karnataka.
- Below Normal rainfall occurred in both the weeks in Jammu & Kashmir, Himachal Pradesh, East Rajasthan, Madhya Pradesh, Chhattisgarh, Gujarat Region and Kerala & Mahe.

# **Extended Range Forecast System**

Rainfall forecast maps for the next 2 weeks (IC -22 July) ( $24^{th}$  July to  $6^{th}$  August, 2020)

# Actual Rainfall (mm/day)



- Week-1 (24.07.2020 to 30.07.2020): Above normal rainfall over parts of north-eastern states and the region of south peninsula, whereas, the region of northwest India, northern India and northern parts of central India will have below normal rainfall.
- Week-2 (31.07.2020 to 06.08.2020): Rainfall over south peninsula and some parts of adjoining central India will increase during the week. Also, the northeast India is likely to get above normal rainfall. The northwest India will have below normal rainfall.

# Strategic Agricultural Planning based on rainfall during next two weeks till 06 August 2020

# **Agro-met Advisories**

### Kerala

Amount of rainfall received over Kerala is 880.6 mm (-26% deficit) during the period of 01 June 2020 - 23 July 2020. The extended range weather forecast for next two weeks (24 - 30 July and 31 July - 06 August 2020) is normal for week-1 and above for week-2.

- Due to the increase in rainfall, there is a chance of rhizome rot in banana. As a precaution, drench the basin with three litre of pseudomonas solution @ 20 g per/litre of water.
- Due to high relative humidity, there is a chance of downy mildew attack in cucurbitaceous vegetables. As a prophylactic measure, spray of pseudomonas solution @ 20 g/litre under the leaves is advised.

#### Tamil Nadu

Amount of rainfall received over Tamil Nadu is 153.1 mm (41% excess) during the period 01 June 2020 - 23 July 2020. The extended range weather forecast for next two weeks (24 - 30 July and 31 July - 06 August 2020) is below normal for week-1 and normal for week-2.

- Present prevailing weather condition is favorable for sucking pest incidence in cotton. It is advised to spray Imidacloprid 200 SL @ 100 ml or Methyl demeton 25 EC 500 ml/ha.
- Present prevailing weather condition is favorable for thrip incidence in onion. To control, spray Dimethoate @ 0.06% or Profenofos @ 0.05%.

#### Maharashtra

Rainfall received over Madhya Maharashtra is 376.6 mm (14% excess), over Marathwada is 383.6 mm (48% excess), Vidharbha is 376.2 mm (-5% deficit) and Konkan region 1655.1 mm (12% excess) during 01 June 2020 - 23 July 2020. The extended range weather forecast for next two weeks (24 - 30 July and 31 July - 06 August 2020) over Vidharbha and Konkan is normal and below normal over Madhya Maharashtra and Marathwada for week-1 and normal over Konkan and below normal over Madhya Maharashtra, Vidharbha and Marathwada for week-2

# Madhya Maharashtra

- To control the incidence of white grub, nematodes and termites in *kharif* crops, application of granular Phorate mixed with fertilizers @ 10-12 kg/ha is advised.
- For control army worm attack in bajra, maize and sugarcane, it is advised to use pheromone trap @ 5/ha.

## Konkan

• Due to intermittent rain and cloudy weather condition, there is possibility of incidence of powdery mildew disease in cucurbitaceous crops. If incidence is noticed, spray Carbendazim @ 5 g or Zineb @ 20 g per 10 liter of water.

## Vidharbha

• For the management of stem fly incidence in crops, it is advised to spray Chlorantraniliprole

18.5% @ 3 ml/10 liter of water, during clear weather.

#### Marathwada

- Under rainy weather condition, it is advised to drain out excess amount of water from crop fields to avoid water stagnation.
- For management of sucking pest in cotton crop, farmers are advised to spray 5% NSKE or Thiamethoxam 25% @ 40 g and Clothianidin 50% @ 30 g per acre during clear weather condition.

#### Hisar

Amount of rainfall received over Hisar is 189.2 mm (16% excess) during 01 June 2020 - 23 July 2020. The extended range rainfall forecast provided for next two weeks (24 - 30 July and 31 July - 06 August 2020) over Hisar is below normal for week-1 and week-2.

- Under prevailing weather conditions, farmers are advised to withhold irrigation in vegetable and fruits crops.
- Farmers are also advised to go for sowing of sorghum, maize and lobia as fodder crops.
- Provide 50 g iodized salt and 50 to 100 g mineral mixture daily with animal feed/fodder to keep animals healthy.

#### Karnataka

Rainfall received during 01 June 2020 - 23 July 2020 over South Interior Karnataka is 306.0 mm (1% excess) and North Interior Karnataka is 289.6 mm (48% excess). The extended range weather forecast for next two weeks (17 - 23 July and 24 - 30 July 2020) over South Interior Karnataka and North Interior Karnataka is above normal for week-1 and above normal over North Interior Karnataka and South Interior Karnataka for week-2.

# South Interior Karnataka

- Farmers are advised for earthing up in long duration crops like redgram and castor to make better availability of soil moisture to the crops.
- Farmers are advised for pruning of dried twigs and branches in mango to facilitate the sunlight to bear more fruits in next season.
- Farmers may go for sowing of red gram as long duration mono crop with varieties TTB-7, BRG1, 2, 4 & 5, castor with varieties DCS-9 (Jyothi), DCH-177&32, maize with varieties Ganga-11, Deccan -103, Vijaya composite, Composite NAC-6004, 6002, hybrid-Nityashree (NAH-2049).

# North Interior Karnataka

- Under prevailing rainy weather condition, sowing of *kharif* crops like greengram, redgram, bajra, navane and groundnut (bunch type), castor, onion, chilli is recommended.
- Farmers are also advised to sow the crops in rows across the slope to facilitate better moisture conservation in the soil.

• 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 1201.6 mm (30% excess) during 01 June 2020 - 23 July 2020. The extended range weather forecast provided for next two weeks (24 - 30 July and 31 July - 06 August 2020) on rainfall over Assam is above normal for week-1 and week-2.

- Under prevailing rainy weather condition, sowing of okra is advised with varieties Pusa Sawani, Arka Anamika and Parbhani Kranti.
- Present weather is favourable for incidence of rhizome rot disease in ginger. For control, soil drenching with Copper oxychloride solution @ 3g/litre of water at 60 and 90 days after planting is recommended.

### Uttar Pradesh

Rainfall received during 01 June 2020 - 23 July 2020 over East Uttar Pradesh is 411.7 mm (30% excess) and West Uttar Pradesh is 181.6 mm (-27% deficit). The extended range weather forecast for next two weeks (24 - 30 July and 31 July - 06 August 2020) over East Uttar Pradesh is above normal and West Uttar Pradesh is normal for week-1 and normal over East Uttar Pradesh and West Uttar Pradesh for week-2.

- Under prevailing weather condition, there is a chance of downy mildew in cucurbits and other vegetables. To control, it is advised to spray Mancozeb @ 2g/ litre of water.
- Prevailing weather condition is favourable for sowing of pearlmillet with recommended composite varieties viz., ICMB-155, WCC-75, ICTP-8203, Raj-171, NDFB-3 and hybrid varieties viz., Pusa-322, Pusa-23 and ICMH-451.
- For the fish seed production, it is advised to disinfect hatchery by using Potassium permanganate @ 5 mg/litre of water.

#### Odisha

Amount of rainfall received over Odisha is 447.2 mm (-4% deficit) during 01 June 2020 - 23 July 2020. The extended range rainfall forecast provided for next two weeks (24 - 30 July and 31 July - 06 August 2020) over Odisha is below normal for week-1 and week-2.

- It is the optimum time for cashew nut planting with high yielding varieties Vengrulla-1.4, BPP-4, Bhubaneswar-1, VRI-2 and Hybrid 2-17.
- It is also the optimum time for mango planting. Recommended varieties are Baiganpalli, Totapuri, Bombay green, Suvarnarekha, Neelam, Himsagar,, Langra, Dusheri, Amrapalli, Mallika, Ratna, Ramkella, Rummani, Sindhu, Alphanso and Keshar,
- There is a chance of top shoot borer infestation in sugarcane crop. To manage, spray Fipronil 5% SC (Reagent/Sergent) @ 600 ml/acre or Profenophos 50% EC (Profigan/Prahar) @ 400 ml/acre by mixing it in 200 litre of water.

# West Bengal

Amount of rainfall received over West Bengal is 499.6 mm (-5% deficit) during 01 June 2020 - 23 July 2020. The extended range weather forecast provided for next two weeks (24 - 30 July and 31 July - 06 August 2020) on rainfall over West Bengal is above normal for week-1 and normal for week-2.

- Due to expected heavy rainfall, it is advised to complete the sowing and transplanting of Aman rice with recommended improved varieties IET-4786, Khitish, Swarna and IR-36.
- Under the prevailing weather condition, there is a chance of stem and root rot disease in jute crop. It is advised to apply 0.1% Carbandazim or 0.25% Mancozeb under clear weather condition.
- For the management of brinjal fruit borer and stem borer, farmers are advised to apply Triazophos 40 EC @ 1.5 ml or Spinosad 45 EC @ 0.2 ml or Cartap Hydrochloride @ 0.75 g/litre of water.

# Bihar

Amount of rainfall received over Bihar is 658.6 mm (53% excess) during 01 June 2020 - 23 July 2020. The extended range weather forecast provided for next two weeks (24 - 30 July and 31 July - 06 August 2020) on rainfall over Bihar is above normal for week-1 and week-2.

- Present weather condition is congenial for planting of mango saplings in the orchards with varieties Mithua, Gulabkhaas, Bambai, Alfanso, Jardaalu, Langra (Maldah), Hemsager, Krishnabhog, Aman Dasahri. Hybridvarieties viz., Mahmood Bahar, Prabhashanker, Amrpaali, Mallika, Manjira, Menika Jawaher, Alfajli, Pusa arunima and Sunder langra are also recommended.
- Farmers of North Bihar are advised for sowing of chilli in nursery raised bed with recommended varieties Pant mirch-3, Krishna, Arka lohit, Pusa jwala, Pusa sadabahar, Punjab lal, Kashi anmol and hybrid varieties Agni rekha, Kalyanpur chaman, Kalyanpur chamatkar, BSS-267.

# Gujarat

Amount of rainfall received over Gujarat is 226.4 mm (-41% deficit) during 01 June 2020 - 23 July 2020. The extended range weather forecast provided for next two weeks (24 - 30 July and 31 July - 06 August 2020) on rainfall over Gujarat is below normal for week-1 and week-2.

- For control of collar rot disease in groundnut, drenching of Carbendazim 10 g or Heaxaconazole 15 ml per 10 litre water is advised.
- Under rainy weather condition, deworming of animals and spray of phenyl in the animal shed are advised to avoid flies and mosquitoes menace.

#### Jammu

Amount of rainfall received over Jammu is 93.0 mm (-55% deficit) during 01 June 2020 - 23 July 2020. The extended range weather forecast provided for next two weeks (24 - 30 July and 31 July - 06 August 2020) on rainfall over Jammu is below normal for week-1 and week-2.

• Due to chances of rainfall, farmers are advised to prepare bunds in the paddy fields for storage

- of rain water and utilize it for puddling.
- Farmers are advised to monitor the attack of cutworm in maize. If observed, apply Carbofuran 3G @ 1kg/kanal during clear weather.

# Rajasthan

Amount of rainfall received over East Rajasthan is 149.8 mm (-33% deficit) during 01 June 2020 - 23 July 2020. The extended range weather forecast provided for next two weeks (24 - 30 July and 31 July - 06 August 2020) on rainfall over East Rajasthan is below normal for week-1 and week-2.

- For the control of fall army worm in maize, spray Thiamethoxam 12.6 ml or Spinetoram 11.7 SC 250ml/ ha.
- Farmers are advised to sow guar and moth. Improved varieties of guar are HG-75, RGC-936, RGC-197, RGC-1017, RGC-1002, RGC-1003, RGC-986 and moth are RMO-257, RMO-225, RMO-425, RMO-423, RMO-40.

#### Himachal Pradesh

Amount of rainfall received over Himachal Pradesh is 194.2 mm (-34% deficit) during 01 June 2020 - 23 July 2020. The extended range weather forecast provided for next two weeks (24 - 30 July and 31 July - 06 August 2020) on rainfall over Himachal Pradesh is below normal for week-1 and week-2.

- Under prevailing weather condition, nursery raising of medicinal plants viz. aswagandha, tulsi, digitalis, jangli bhindi and agarkara is advised.
- There is a higher chance of ecto-parasite attack in dairy animal. To control, spray Butox @ 2ml/litre of water in cowshed.

# Madhya Pradesh

Amount of rainfall received over Madhya Pradesh is 377.4 mm (-3% deficit) during 01 June 2020 - 23 July 2020. The extended range weather forecast provided for next two weeks (24 - 30 July and 31 July - 06 August 2020) on rainfall over Madhya Pradesh is below normal for week-1 and week-2.

Under the prevailing weather condition, transplanting of egg plant, tomato, chilli and kharif
onion is advised.

#### Uttarakhand

Amount of rainfall received over Uttarakhand is 395.1 mm (-15% deficit) during 01 June 2020 - 23 July 2020. The extended range weather forecast provided for next two weeks (24 - 30 July and 31 July - 06 August 2020) on rainfall over Uttarakhand is below normal for week-1 and week-2.

- For the control of insect infestation in the crop fields, it is advised to use pheromone/light traps or yellow strips.
- Under rainy weather condition, farmers must arrange to drain out excess rain water from vegetable fields.

#### Jharkhand

Amount of rainfall received over Jharkhand is 391.1 mm (-11% deficit) during 01 June 2020 - 23 July

2020. The extended range weather forecast provided for next two weeks (24 - 30 July and 31 July - 06 August 2020) on rainfall over Jharkhand is above normal for week-1 and week-2.

- Farmers are advised for cultivation of green fodder crops like maize (African tall or J-100), lobia (PC 4200) or moth (Vidhaan-1).
- Intercultural operation is advised in the crop fields to conserve soil moisture and control of weed.

# Punjab

Amount of rainfall received over Punjab is 202.7 mm (13% excess) during 01 June 2020 - 23 July 2020. The extended range weather forecast provided for next two weeks (24 - 30 July and 31 July - 06 August 2020) on rainfall over Punjab is below normal for week-1 and week-2.

- To manage the foot rot disease in basmati rice, it is advised to treat the seed with Trichoderma harzianum @ 15g/kg before sowing.
- Prevailing weather condition is favorable for fruit rot and die back disease in chilli crop. Farmers are advised to spray 250 ml Folicur/ 750 g Indofil M-45 /Blitox in 250 litres of water per acre at 10 days interval.

# Disclaimer:

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