



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

Valid for 21st July to 3rd August, 2017

Date of Issue: 21st July, 2017

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**Earth System Science Organisation
India Meteorological Department**

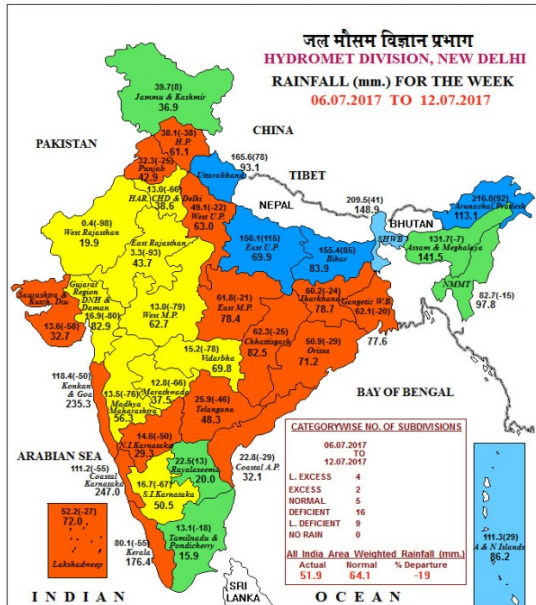
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**Indian Council of Agricultural Research (ICAR)
All India Coordinated Research Project on Agricultural Meteorology (AICRPAM),
Central Research Institute for Dryland Agriculture (CRIDA), Hyderabad**

Realized Rainfall

(06th July to 19th July 2017)

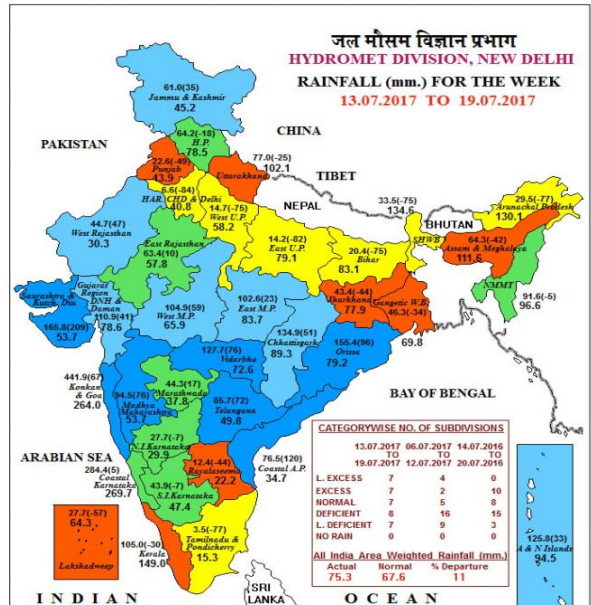
भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT



LEGEND: ■ L. EXCESS (+60% OR MORE) ■ EXCESS (+20% TO +59%) ■ NORMAL (+19% TO -19%)
 ■ DEFICIENT (-20% TO -59%) ■ L. DEFICIENT (-60% TO -99%) ■ NO RAIN (-100%) ■ NO DATA

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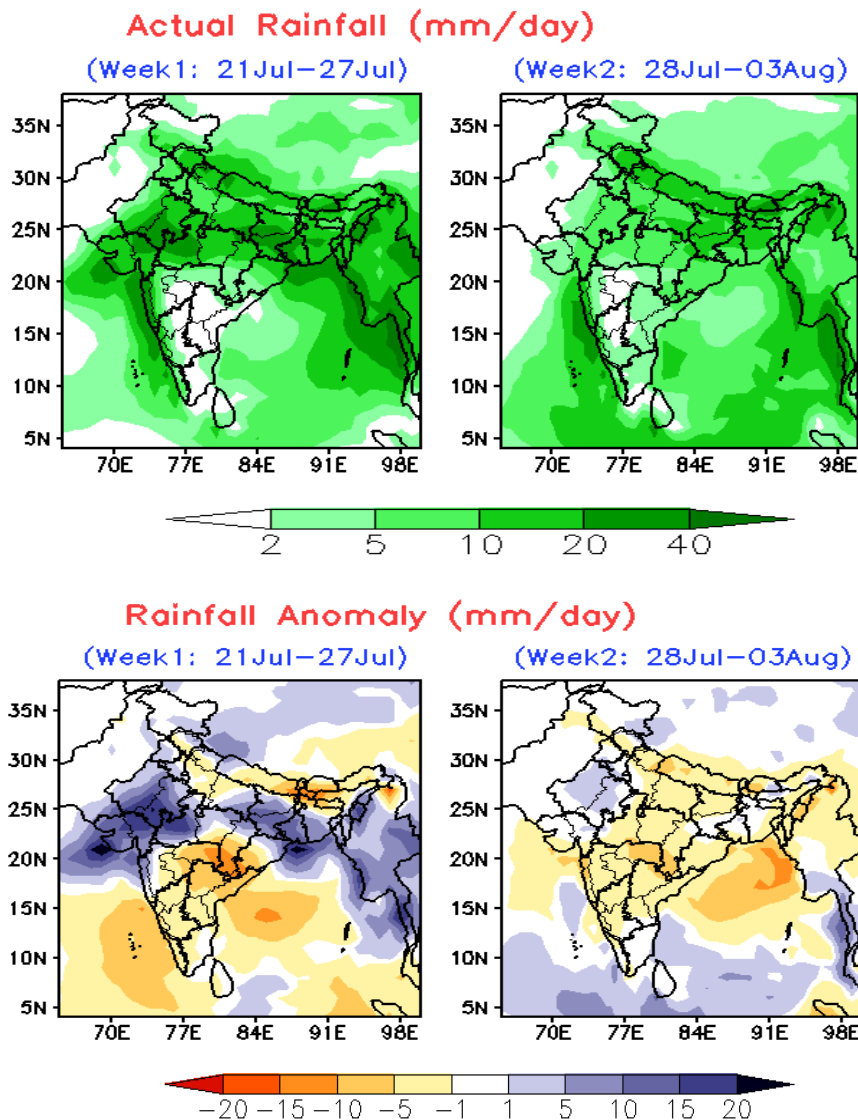
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NOTES:
 [a] Rainfall figures are based on operational data.
 [b] Small figures indicate actual rainfall (mm.), while bold figures indicate Normal rainfall (mm.)
 Percentage Departures of Rainfall are shown in Brackets.

- Normal rainfall occurred during last two weeks in Nagaland, Manipur, Mizoram and Tripura.
- Normal or above normal rainfall occurred in either of the last two weeks in all the sub-divisions, except Kerala, Jharkhand, Gangetic West Bengal and Punjab.
- Below normal rainfall occurred in either of the last two weeks over all the sub-divisions except Nagaland, Mizoram, Manipur and Tripura.

Extended Range Forecast System

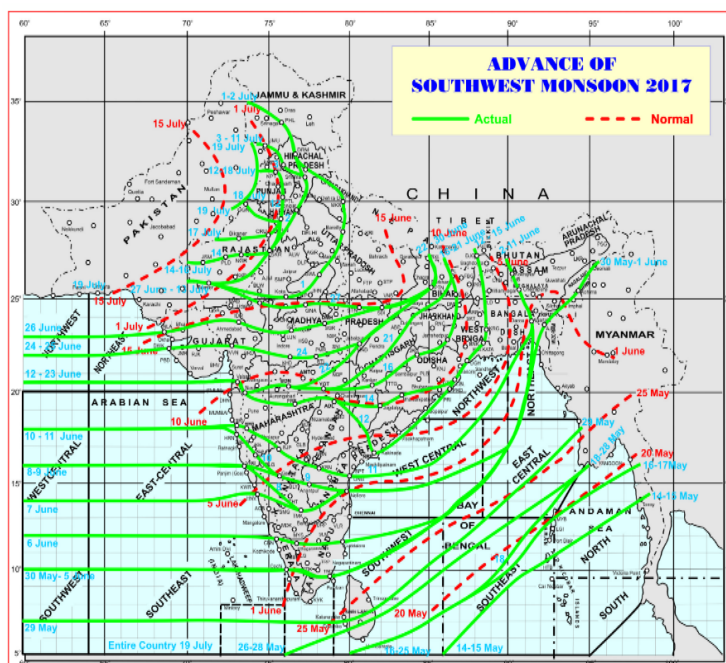
Subdivisionwise rainfall forecast and anomaly maps for the next 2 weeks (IC = 19 July)



- Extended Range Forecast (ERF) indicates that, during week 1 (21-27 July), the rainfall is expected to be above normal over Northwest part of India (Rajasthan, Punjab, Haryana), western parts of India (Gujarat, Konkan region and parts of western Maharashtra), northern part of central India (west MP, east MP, northern belt of Chhattisgarh and north part of Odisha), Bihar, Jharkhand, GWB, and part of eastern UP during the week
- During week 2 (28 July – 03 August), the isobars over India will likely to change from east-west orientation to somewhat north-south orientation thereby pressure gradient will decrease and associated monsoon circulation will be weak. As a result the monsoon rainfall will be weak over most of India
- Meteorological sub-divisions/states, including Chhattisgarh, Telangana, Vidarbha, Karnataka, Kerala, Andhra Pradesh may likely to experience deficit rainfall conditions during both the weeks

Advance of Southwest Monsoon - 2017

21st July, 2017



- The southwest monsoon has covered the entire country on 19 July 2017

Strategic Agricultural Planning based on rainfall during next two weeks till 3rd August

Agromet Advisories

Kerala

- Paddy: There is a chance of case worm infestation in paddy field. To control this 25 kg sawdust or rice husk ash mixed with 1 litre kerosene per acre can be spread after draining the field
- Vegetables: Apply tobacco decoction or 2% neem oil-garlic-soap emulsion for control of aphids in cowpea
- Cardamom: As a prophylactic measure to control rhizome rot drench the soil with 2-3 liters of copper oxy chloride (0.25%) solution

Tamil Nadu

- Complete transplanting of *kuruvai* rice in Western Zone
- Apply irrigation to banana, coconut, rubber, black pepper and other horticultural crops as subdued rainfall is expected in High Rainfall Zone. Avoid moisture loss by undertaking mulching in nutmeg, clove and cinnamon field through farm waste materials
- In Cauvery delta zone, maize/sunflower/groundnut can be sown instead of dry rice under laterite and red soil conditions
- In high rainfall zone (Kanyakumari district), planting with Rasakathali, Poovan, Nendhran, Matti and Red Banana varieties is advocated
- Undertake land preparation for sowing of gourds in Western Zone
- In Western Zone, in *kuruvai* rice, apply Butachlor at 1.0 litre/acre or Bensulfuron Methyl + Pretilachlor 4 kg/acre mixed with 20 kg sand and broadcast uniformly by keeping thin film

of water on 3-5 DAT

- Incidence of stem borer was observed in young *Kuruvai* rice crop in the Cauvery Delta Zone; spray 400 ml/acre of Profenophos 50 E.C. (or) 6 kg/acre of Cartap hydro chloride to control stem borer
- Prevailing weather may induce slug caterpillar in coconut trees in Western Zone. root feeding with Monocrotophos + water, each @ 15 ml / tree is advised
- To prevent early shedding of buds and squares in cotton in Karaikal district, spray 40 ppm NAA (40 mg of Naphthalene Acetic Acid in one litre of water) at 60 and 90 DAS
- Due to prevailing weather conditions, aphids incidence in pulses is observed in North Western Zone. Foliar spray of neem based chemical @ 2 ml/litre of water along with adjuvant @1 ml/liter of water in the evening hours is advised
- Due to cloudy conditions, there is chance of incidence of late blight disease in potato in High Altitude Hilly Zone; spray Cymoxanil 8 % + Mancozeb 64 % @ 2 g/litre of water for control

Karnataka

South Interior Karnataka

- Since there is a deficit rainfall during this month, protective irrigation may be given for the crop sown in the pre-monsoon shower
- Postpone sowing operation until soaking/sufficient rainfall received
- Wherever, the long duration crops like redgram and castor has been sown, undertake earthing up
- Make use of farm pond water for protective irrigation of crops during the prevailing dry spell

Andhra Pradesh

Rayalaseema

- Completion of sowing of castor, red gram and korra in Anantpur and Kurnool districts by 31st July
- Light moisture stress was noticed in the groundnut crop in Ananthapuram district. Provide protective irrigation (20 mm), if available, through farm ponds/ nearby available resources
- Undertake thinning in June sown red gram, castor crop and intercultural operations in June sown crops in Ananthapuram and Kurnool districts to conserve soil moisture
- Undertake sowing of groundnut after receipt of sufficient rain in Ananthapur districts
- Due to deficit rainfall during the week in scarce rainfall zone (Ananthapuram and Kurnool), farmers need to wait until receipt of sufficient rainfall to take up sowing of rainfed crops
- Completion of sowing of red gram in Chittoor district
- In Kadappa district, in early sown groundnut (at flowering stage), due to dry spell, the crop is likely to wilt; protect the crop by applying irrigation with sprinklers or rain guns, wherever possible
- Farmers are advised to provide protective irrigation to early sown rainfed groundnut where ever water is available in farm ponds or nearby water sources as the crop is experiencing moisture stress. Farmers can utilize Pantasanjeevani program of Govt.of AP in Ananthapuramu district for providing protective irrigation
- Farmers are advised to open conservation furrows at 3.6 m interval to conserve rainwater

in rainfed crops

Maharashtra

Marathwada

- Keep the crop fields weed free and in fallow lands
- Apply protective irrigation by sprinkler to *kharif* crops and vegetable crops wherever necessary

Vidarbha

- Remaining unsown areas can be accommodated with suitable crops/crop varieties/intercropping (as mentioned below)
 - Early maturing soybean varieties (JS 9560, JS 9305) may be sown up to 25 July
 - Pigeonpea cultivars AKT 8811 and Vipula with 60x30 cm spacing; PKV- Tara and BSMR-736 with 90x20 spacing
 - Intercropping systems: pigeon pea + soybean (1:2 / 2:4), sunflower + pigeonpea (2:1) or in soybean after every 6 or 9 rows one row of pigeonpea may be sown
- Undertake intercultural operations (hand weeding/hoeing) in early sown crops for timely control of weeds

Gujarat

Many places in districts of Morbi, Surendranagar, Jamnagar, Rajkot and Kutch witnessed flood like condition with receipt of average district rainfall of 107 mm, 97 mm, 66 mm, 54 mm and 28 mm, in respective districts during 13-15 July. Gir Somnath, Jamnagar districts have recorded more than 100 mm rainfall and Kachchh district has received 99 mm rainfall on 16 July. Some of the contingency measures/advisories are:

- Drain out excess water from fields
- In case of damage or loss of *kharif* crops due to flood, re-sowing is recommended. Sowing of pulses and below listed crops is advised
 - Sorghum (grain purpose): GJ-38, GJ-39, GJ-40, GJ-41
 - Sorghum (fodder purpose): CSH-6, GFS-4, GFS-5, GAFS-11
 - Sunflower: EC-68414, Modern GS-1, 2 & 3
 - Sesame: Gujarat sesame –1, 2, 3 & 4
 - Castor: GAUCH-1, GCH-2, GCH-4, 5, 6 & GCH-7
- Transplanting of paddy is recommended. In case of non-availability of seedling and beds are filled with water, broadcasting of pre-germinated paddy is recommended after puddling

Northeast Region

Assam

- Continue transplanting of *Sali* rice
- In flood affected areas if rice nurseries are damaged, continue nursery sowing of short duration/submergence tolerant varieties of rice like Luit and Dishangor. Continue nursery preparation for long duration/late transplanting varieties like Manohar Sali / Gitesh. For flood affected areas, farmers are advised to grow flood tolerant Sali rice variety viz. Swarna Sub-1, Ranjit Sub-1 and Bahadur Sub-1

- Continue sowing of red gram, sesame and soybean
- Continue planting of banana and lemon trees
- Continue planting of coconut seedlings and transplanting of arecanut seedlings
- In Dhemaji, Darrang, Lakhimpur, Sonitpur and Udalgiri districts of North Bank Plain Zone of Assam, continue transplanting of Sali rice. In flood affected areas, if there is total damage of seedlings of rice or crops in the main field, farmers are advised for replanting with medium to short duration varieties like - Monohar Sali, Salpona, Prasadbhog, Gobinbhog etc. in nursery bed within 1st week of August. Initiative should be taken for raising community nursery for late planting with old seedlings of the varieties like Profulla and Gitesh (If more than 50% damaged) or wet seeding of sprouted seeds @ 75-80 kg/ha of short to medium duration varieties like Disang, Luit, (100 days) Kapili, Kalong (120 days). If the field is heavily damaged, undertake late and staggered planting with the old seedlings (50-60 days old seedlings) of the varieties like Profulla and Gitesh. Undertake direct seeding with the photo insensitive short duration variety like Luit and for repeat flood prone areas, adopt of submergence tolerance varieties like Jalashree and Jalkuwari
- Continue sowing of sesame in Upper Bramhaputra Valley Zone of Assam
- In Upper Bramhaputra Valley Zone of Assam, maintain proper drainage facilities to prevent rot disease in pineapple
- Ensure the availability of concentrate green grasses along with vitamins and minerals for farm animals
- Protect the fisheries from intrusion of flood water and unwanted fishes by putting nylon net or bamboo net

Meghalaya

- Continue transplanting of *Sali* rice and complete by end of July
- Hand weeding in soybean
- Avoid water stagnation in soybean
- Earthing up in ginger and turmeric
- Maintain proper drainage facilities in standing crop fields

Arunachal Pradesh

- Continue transplanting of finger millet and rice
- Maintain proper drainage in already sown crop fields
- Continue sowing of large cardamom and planting of banana

Nagaland

- Continue transplanting of TRC/WRC rice in Dimapur, Kephire, Kohima, Longleng, Mokokchung, Mon, Paren, Phek, Tuensang, Wokha and Zunheboto districts of Nagaland
- Maintain proper drainage to manage soil borne root diseases in green gram field at flowering stage
- Destroy infected plants of okra, cucurbits, brinjal and Naga King chilli to prevent further spread of disease

Manipur

- Continue transplanting of *kharif* rice
- Nursery preparation using dry bed method with RC Maniphou-12 for transplanting before 15th August

- Apply Carbofuran 3G @ 2 kg/hectare a week before uprooting the seedling
- Avoid water logging in and around the ginger and turmeric field
- Maintain proper drainage facilities in standing crop fields

Mizoram

- Continue transplanting of rice
- Maintain proper drainage in the *Jhum* rice, cowpea, okra and maize fields

Tripura

- Continue transplanting of *Aman* rice

West Madhya Pradesh

- Continue transplanting of rice in Jhabua Hill Zone and Gird Zone
- Continue sowing of soybean, pigeon pea, urd, moong, maize, sorghum and cotton in Malwa Plateau Zone
- Complete sowing of red gram, urad, moong, bajra and soybean in Gird Zone
- Continue transplanting rainy season vegetables like brinjal, tomato, kharif onion, early cauliflower, chilli etc. and fruit plants in Malwa Plateau Zone
- Provide adequate drainage in standing crop fields in Malwa Plateau Zone
- Undertake gap filling in areas of Malwa Plateau Zone where germination of soybean and maize is poor

❖ National AAS Bulletin based on ERFs is also available at <http://www.imdagrimet.gov.in/erfsview15>