



National Agromet Advisory Service Bulletin

based on

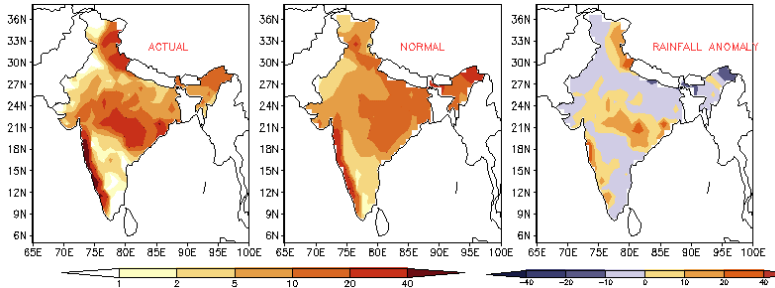
**Extended Range Weather Forecast
Valid for 26th July to 7th August, 2014**

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**Earth System Science Organisation
Agricultural Meteorology Division
India Meteorological Department, Pune
&
Indian Council of Agricultural Research
AICRPAM, CRIDA, Hyderabad**

Realized Rainfall (mm/day) (10th to 23rd July)



During the last two weeks, many parts of Konkan & Goa and Coastal Karnataka received an average rainfall of more than 40 mm/day. Many parts of Uttarakhand, Chhattisgarh, some parts of Interior Karnataka, Vidarbha, Madhya Maharashtra and Odisha received an average rainfall of 20-40 mm/day. Many parts of Himachal Pradesh, Madhya Pradesh, Odisha, some parts of Arunachal Pradesh, Assam & Meghalaya, Manipur, Gujarat Region and Sikkim received an average rainfall of 10-20 mm/day. Many parts of Tripura, Nagaland, Jharkhand, West Bengal, Uttar Pradesh, East Rajasthan, some parts of Mizoram, Bihar, Saurashtra and Coastal Andhra Pradesh received an average rainfall of 5-10 mm/day. Many parts of West Rajasthan, Marathwada, Rayalaseema, Telangana, Jammu & Kashmir, Punjab & Haryana received an average rainfall of 2-5 mm/day. Mainly dry/dry weather prevailed over rest of the country.

Monsoon Watch as on 25th July 2014

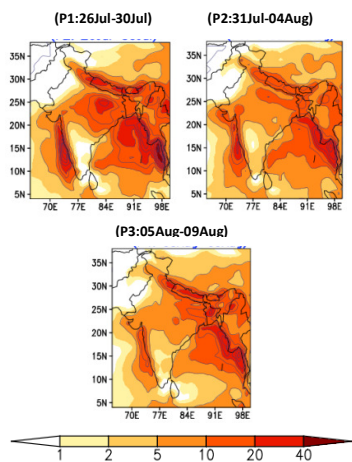
- The Southwest monsoon was Vigorous over Gujarat region & Madhya Maharashtra and active over West Madhya Pradesh, Saurashtra & Kutch and north & south interior Karnataka.

Extended Forecast System (based on CFS model)

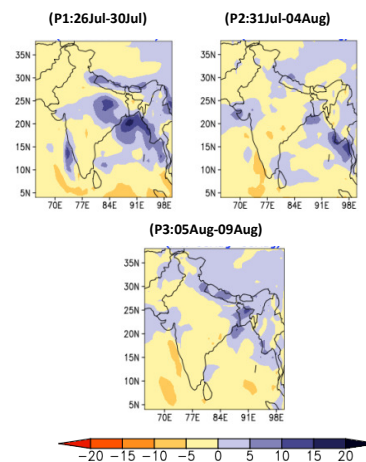
Forecast based on IC = 20th July, 2014

Rainfall forecast for the 3 pentads

Rainfall Forecast Actual (mm/day)



Rainfall Forecast Anomaly (mm/day)



P1, P2, P3: PENTADS

First pentad (26-30 Jul): Rainfall of about 20-40 mm/day is likely over some parts of Uttarakhand, Sikkim, East Madhya Pradesh, Jharkhand and Bihar, rainfall of about 10-20 mm/day is likely over many parts of Konkan & Goa, Coastal Karnataka, Vidarbha, West Madhya Pradesh, Odisha, West Bengal, Arunachal Pradesh, Assam, Nagaland, Manipur and Himachal Pradesh, some parts of Chhattisgarh and East Uttar Pradesh, rainfall of about 5-10 mm/day is likely over many parts of Gujarat and Saurashtra and Kutch, some parts of Jammu & Kashmir, Madhya Maharashtra, Meghalaya, Mizoram, Tripura and Kerala, rainfall of about 2-5 mm/day is likely over some parts of East Rajasthan, Marathwada and Coastal Andhra Pradesh. Mainly dry weather would prevail over rest of the country.

Second pentad (31Jul-04 Aug): Rainfall of about 10-20 mm/day is likely over many parts of Uttarakhand, Himachal Pradesh, Gujarat region, West Bengal and Sikkim some parts of Uttar Pradesh, Bihar, Jharkhand, Manipur, Nagaland, Saurashtra and Kutch, Konkan & Goa, rainfall of about 5-10 mm/day is likely over many parts of Jammu & Kashmir, Arunachal Pradesh, Assam & Meghalaya, Mizoram, Tripura, Odisha, Madhya Pradesh, Chhattisgarh and Vidarbha, some parts of East Rajasthan, Punjab, Coastal Karnataka and Madhya Maharashtra, rainfall of about 2-5 mm/day is likely over many parts of Marathwada, Interior Karnataka, Kerala, Andhra Pradesh and Tamil Nadu, some parts of Haryana and West Rajasthan. Mainly dry weather would prevail over rest of the country.

Third pentad (05-09Aug): Rainfall of about 20-40 mm/day is likely over many parts of Uttarakhand, rainfall of about 10-20 mm/day is likely over many parts of Himachal Pradesh, East Uttar Pradesh, Bihar, Jharkhand, West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Manipur, Tripura, Konkan & Goa and some parts of West Uttar Pradesh, Chhattisgarh and Nagaland, rainfall of about 5-10 mm/day is likely over many parts of Jammu & Kashmir, Gujarat, Madhya Pradesh and Odisha and some parts of East Rajasthan, Punjab and Coastal Karnataka, rainfall of about 2-5 mm/day is likely over many parts of Vidarbha, Madhya Maharashtra, Marathwada and Andhra Pradesh, some parts of Haryana, West Rajasthan, Interior Karnataka and Kerala. Mainly dry weather would prevail over rest of the country.

Strategic Agricultural Planning based on rainfall during next 2 weeks till 07th August

Current Status:

Southern India: In coastal area of Andhra Pradesh, rainfall was deficit by 46% and in Rayalaseema only by 14%. In Telangana the deficit was 55%. In Andhra Pradesh of the 41.70 lakh ha of normal sown area, about 30% of area (12.45 lakh ha) has been covered under different crops. In Telangana, about 23.30 lakh ha (58% of the normal kharif season area of 40.38 lakh ha) has been covered.

Western India: The rainfall over the entire state of Gujarat was deficit by about 42% and 38% of the normal area is covered so far under various crops. Cereals in 9%, pulses in 15%, oil seeds in 40% and other crops in 50% of their normal area are sown.

Central India: In Madhya Maharashtra rainfall was deficit by 29%, in Marathwada by 58%, in

Vidarbha by 14% and in Konkan&Goa by 23%. In Vidarbha region, sowings of cotton and soybean are in progress. In Amravati division 34% (11.1 lakh ha) and in Nagpur division 36.2% (6.64 lakh ha) of their normal sowing area has been covered. In Chhattisgarh, 55% of normal kharif sowing area is covered.

Northwest India: In west Rajasthan monsoon rainfall was deficit by 42% and in east Rajasthan by 39%. Sowings are in full swing after receipt of recent rainfall in south and eastern parts of Rajasthan. In Jammu about 90% of normal sowing area is already covered.

East and Northeast India: In Bihar the rainfall was deficit by 20% and transplantation of paddy in low and medium lands, sowing of red gram and black gram in uplands are in progress. Rainfall was deficit by 11% over Jharkhand and about 19% of paddy area, 64% of maize, 34% of pulses and 27% of normal area of oilseeds are covered.

Future strategies

Southern India

Northern Karnataka: There is chance of dry spell conditions and hence farmers are advised to complete sowings of onion, sesame, maize, sunflower, niger, castor, bajra, groundnut (spreading), red gram, desi cotton, navane, horse gram, cowpea crops and adopt the following agronomic measures while sowing.

- Bajra: Soak the seeds in water for 10 hours and dry under shade and sow in wider row spacing up to 135 cm.
- Groundnut (Spreading type): Open up conservation furrow after every 8th row for moisture conservation.
- Pigeonpea: Soak seeds in CaCl₂ solution (2%) for 1 hour and dry under shade for 7 hours and then treat seed with rhizobium @ 500g/10kg seed .
- Niger: Soak the seeds in water for 6 hours and dry under shade, then treat seeds with thiram/captan @ 3g/kg seeds.
- Intercropping of pearl millet + pigeonpea (2:1), pearl millet + castor (2:1), kharif sorghum + red gram (5:1), red gram + sesamum (1:2 or 2:4); red gram + horse gram (2:1) is suggested to minimize the drought risk.
- Low water requiring crops like horse gram, foxtail millet and castor crops may be preferred keeping in view the prevailing deficit rainfall conditions.

Andhra Pradesh and Telangana

- Direct seeding of paddy may be taken up with short duration varieties under dry conditions and later converted to wet paddy after receipt of good rainfall.
- Direct sowing of paddy is suggested for Srikakulam and Krishna districts.
- In canal commands in coastal areas of AP, direct sowing of paddy up to July and transplanting of paddy up to 15th of August is suggested.

- In NSP command areas of Nalgonda, Guntur, Krishna and Prakasam districts as water levels in reservoirs are very low and release of water in canals is not certain, farmers are advised to take up rainfed crops like maize, cotton, redgram, greengram.
- In Prakasam district, adopt closure spacing in cotton and redgram and form dead furrows for moisture conservation.

Western India

Gujarat: Farmers are advised to take up the following contingent crops and varieties in view of delay in the commencement of season.

South and Middle Gujarat region

- In soybean, cv. Guj. Soybean1, 2, JS-335.
- In bajra, cv.GHB-744, GHB-538,732 transplant only three weeks old nursery.
- Short duration oilseeds crops: sunflower (cv. Modern and EC-68414 and Guj-1) and Sesame (cv. Guj. Tal 1,2, 10) may be undertaken; Pulse crops like: Blackgram (cv. T-9, Guj. Udid-1), greengram (cv. GM-4, K-851, Meha), cowpea (cv. Guj. cowpea 1,2,4, Pusa Falguni); Grain Sorghum (cv. GJ-35,36 and 37) and Fodder sorghum (cv. S-1049, C-10-2, Gundari, GFS 4,5).
- In Baroda and Panchmahal districts, paddy cv. GR 5, 8 ,9, Sathi 34-36, IR-28, ADR-1 and Sukhvel-20 may be drilled.

North Gujarat Region

- Sesamum (cv. Guj. Tal 1,2, 10), Sunflower (cv. Modern, EC 68414), Fodder sorghum (cv. S-1049, C-10-2) may be sown.
- In bajra, cv.GHB-744, GHB-538,732 transplant only three weeks old nursery.

Saurashtra region

- Blackgram- cv. T-9, Guj. Udid-1; Greengram-GM-4, K-851, Meha; Sorghum cv. CSH-6 and CFS-4 for fodder purpose; Guar-Guj. Gaur 1 and 2 specifically for Kutch region
- Sesame-Purva-1; Cotton-G. cot-13, 21, 23, V-797; Pigeonpea cv. BDN-2,ICPL-87,GT-100, GT-101, Vaishali.

Central India

Vidarbha: After cessation of rainy weather and under workable field conditions, follow contingency crop planning is suggested.

- Avoid sowing of cotton.
- Avoid sowing soybean beyond 25th July. In case farmers prefer to sow soybean then, JS-335, JS 93-05, JS 95-60 varieties are suggested.
- Prefer soybean+ pigeon pea intercropping (2:1 or 4:2 or 6:1 or 9:1).

- While sowing pigeonpea as sole crop, prefer AKT-8811, Vipula, PKV-Tara, BSMR 736 varieties and adopt closer spacing (60x20cm).
- In eastern Vidarbha, direct sowing of early and mid late maturing paddy varieties may be taken up by wet seeding method wherever the nursery is not ready.
- Sowing alternative crops like sunflower (TAS 82, PKV SF-9, PKVSH-27, KBSH 1 and KBSH 44), Pearl millet (PKV Raj, Shradha and Saburi) Sesame (AKT-64 and JLT-7), Castor (AKC-1, GCH-4,5,6, DCH-117,32), and pearl millet+ pigeon pea (2:1 or 4:2), sunflower+ pigeonpea (2:1), sesame+ pigeonpea (4:1) intercropping systems is suggested till 15th August.

Northwest India

Rajasthan

- Sowing of maize and sorghum crops may be avoided and instead black gram, green gram, cluster bean and sesame are suggested.
- Maize and sorghum can be sown for fodder and improved varieties for maize (fodder) or African Tall, Pratap Makka Chari-6, and for Sorghum (fodder): Rajasthan Chari-1, Rajasthan Chari-2, Pratap Chari-1080, SSG-59-3.
- Improved varieties in cluster bean like RGC-936, black gram (RBU-38, T-9), green gram (SML-668, K851), Sesame (RT-46, RT-125) may be preferred.
- Intercropping of Groundnut cv. JL-24, Pratap mungphali-2 with sesame at 6:2 row ratio is suggested.

Eastern India

Bihar

- Transplanting of paddy may be avoided beyond 31 July under upland conditions.
- Crops like blackgram (T-9, Navin), redgram (Bahar, Pusa-9, Narendra Arhar-1, Malvia-13), sweet potato (Rajendra mishrikand-11) are suggested for uplands in place of paddy.
- If good rainfall receives before 15th August, short duration paddy varieties such as Turanta, Prabhat, Saket-4 may be transplanted in medium and low lands.
- Intercropping of maize (Suwan, Deoki, Shaktiman-1, 2) + black gram (T-9, Pant U-31, Pant U-19) is also recommended for uplands.