



National Agromet Advisory Service Bulletin

based on

Extended Range Weather Forecast

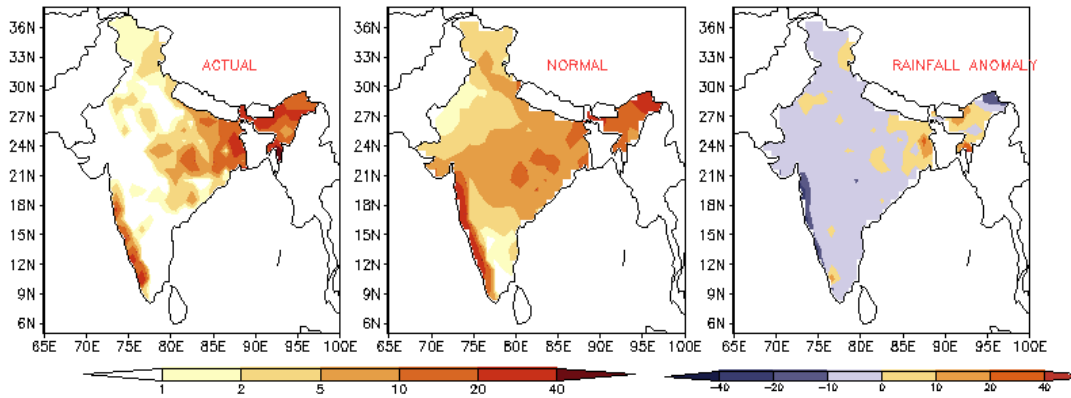
Valid for 4th to 17th July, 2014

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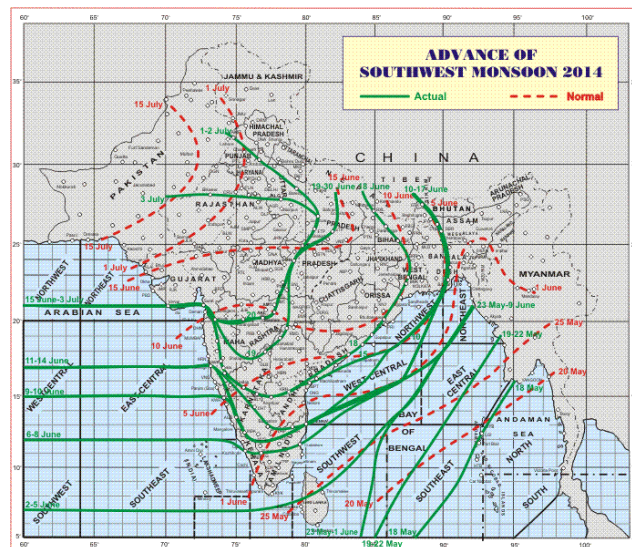
**Earth System Science Organisation
Agricultural Meteorology Division
India Meteorological Department, Pune
&
Indian Council of Agricultural Research
AICRPAM, CRIDA, Hyderabad**

Realized Rainfall (19th June to 2nd July)



During the last two weeks, many parts of Coastal Karnataka, Konkan & Goa, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram, Tripura, West Bengal, Bihar, Jharkhand, East Uttar Pradesh and Chhattisgarh and some parts of Kerala received an average rainfall of 10-40 mm/day. Some parts of Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Haryana, East Madhya Pradesh and Odisha received an average rainfall of 2-5 mm/day. Mainly dry/dry weather prevailed over rest parts of the country.

Northern Limit of Monsoon 4th July, 2014

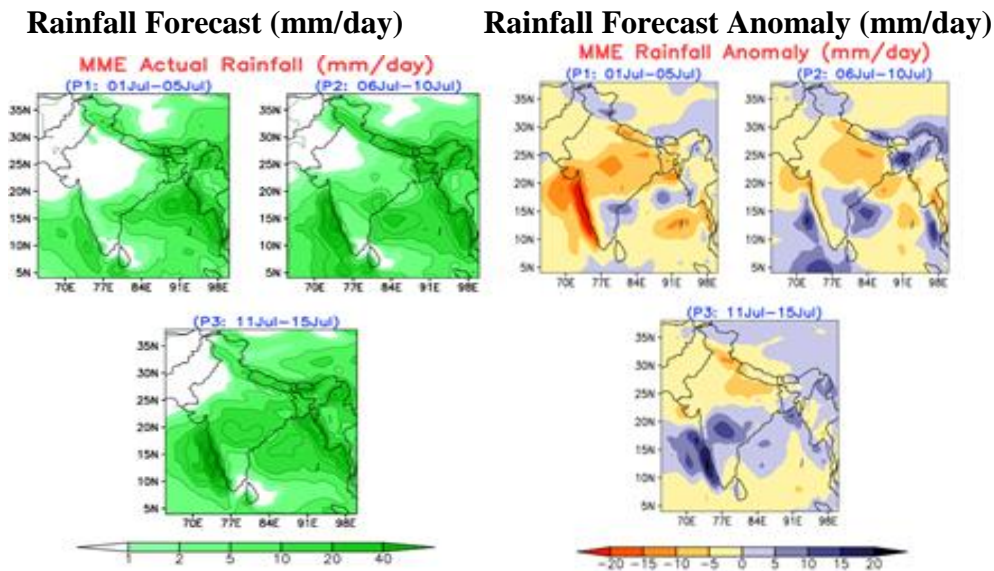


- The Northern Limit of Monsoon (NLM) passes through Lat. 21°N / Long. 60°E, Lat.21°N / Long. 65°E, Veraval, Surat, Nasik, Wasim, Damoh, Lucknow, Aligarh, Bikaner and Lat. 28°N / Long. 72°E.
- Conditions are favourable for further advance of southwest monsoon into remaining parts of Uttar Pradesh and some more parts of Rajasthan and Madhya Pradesh during next 3 days.

Extended Forecast System (based on CFS model)

forecast based on IC = 30th June, 2014

Rainfall forecast for the next 3 pentads



P1, P2, P3: PENTADS

First pentad (1-5 July): Rainfall of about 5-20 mm/day is likely over northeastern states and Sub-Himalayan West Bengal & Sikkim, rainfall of about 5-10 mm/day is likely over parts of Coastal Andhra Pradesh, rainfall of about 2-10 mm/day is likely over Telangana, Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Gangetic West Bengal, Bihar, Jharkhand, Odisha, Kerala, Maharashtra, Karnataka and parts of Punjab, Chhattisgarh, Rayalaseema and Tamil Nadu.

Second pentad (6-10 July): Rainfall of about 10-20 mm/day is likely over northeastern states, Sub-Himalayan West Bengal & Sikkim, Himachal Pradesh, Uttarakhand, Coastal Andhra Pradesh and parts of Jammu & Kashmir, Konkan & Goa, Coastal Karnataka, Kerala, Rayalaseema, Telangana, rainfall of 5-10 mm/day is likely over Madhya Maharashtra, Marathwada, Vidarbha, Bihar, Jharkhand, Odisha, Chhattisgarh and Interior Karnataka, rainfall of about 2-10 mm/day is likely over parts of Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Uttar Pradesh, Gangetic West Bengal, Gujarat, Madhya Pradesh and Tamil Nadu.

Third pentad (11-15 July): Rainfall more than 40 mm/day is likely over Kerala, Coastal Karnataka, Konkan & Goa, rainfall of 10-40 mm/day is likely over northeastern states, West Bengal & Sikkim, Odisha, Chhattisgarh and Maharashtra, rainfall of 10-20 mm/day is likely over Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Uttar Pradesh, Bihar, Jharkhand, Madhya Pradesh and parts of Gujarat region, rainfall of about 5-10 mm/day is likely over Interior Karnataka and parts of Andhra Pradesh and rainfall of about 1-5 mm/day is likely over East Rajasthan, Saurashtra and Tamil Nadu.

Strategic Agricultural Planning based on rainfall during next 2 weeks till 17th July

Current Status:

Due to good rainfall during last fortnight and likely occurrence of rainfall during next fortnight, there is normal progress of transplanting of *virippu* rice in Kerala and *kharif* rice in Coastal Karnataka and thereby, overall agricultural activities are satisfactory over these regions.

Agricultural situation is also satisfactory in **Northeast India** and **West Bengal** and following activities are in progress:

- Nursery sowing of *sali* rice and sowing of arhar, sesame and groundnut in Assam
- Complete sowing of groundnut and soybean and transplanting of *Sali* rice and sowing of pigeon pea in Meghalaya
- Sowing of *kharif* rice, soybean, black gram and green gram in Arunachal Pradesh
- Sowing / transplanting of *kharif* rice, sowing of soybean and groundnut in Mizoram
- Sowing / transplanting of *kharif* rice, sowing of soybean, groundnut and black gram in Manipur
- Nursery sowing / transplanting of rice, sowing of soybean, groundnut, black gram and green gram in Nagaland
- Nursery sowing / transplanting of *aman* rice in Tripura and West Bengal.

Future strategies:

In **East India**, conditions are favourable for normal agricultural activities like nursery sowing/transplanting of *kharif* rice and sowing of maize, pigeon pea and transplanting of finger millet in Bihar. In uplands of Bihar avoid paddy and sow sesamum (cv.Krishna) or Arhar (cv. Bahar/Narendra, pusa-9, Arhar-1, Malviyal-3) or intercrop of maize (cv.Suwan) and urad (Pant U-31). Short (Turanta, Prabhat, Richhariya, Dhanlakshmi, Saket) or medium duration (Sita, Kanak, IR-36, Santosh) paddy varieties are suggested, in place of long duration varieties for medium and low lands. In Jharkhand sowing of direct seeded rice, maize, green gram, black gram, groundnut, soybean, sesame and pigeon pea is suggested and sowing of maize, arhar, groundnut, green gram, black gram, ragi and cotton is recommended for Odisha.

In **South India**, as there is probability of rainfall over Andhra Pradesh and Interior Karnataka from second week of July, nursery sowing of rice and sowing of maize, groundnut, cotton and castor in Rayalaseema, sowing of cotton, maize, groundnut, jowar, soybean and pulses in Telangana, nursery sowing of rice and planting of sugarcane in Coastal Andhra Pradesh, nursery sowing of rice and sowing of cotton, jowar, maize, ragi, sunflower, groundnut in South Interior Karnataka, jowar and soybean in North Interior Karnataka may be carried out. Farmers in Northern Dry Zone of Karnataka are advised not to take up sowing of green gram and black gram at present. They are advised to keep the land fallow in areas where double cropping had been planned in medium to deep black soils. Soil and moisture conservation techniques such as compartment bunding, ridges and furrows across the slope are suggested for medium and deep black soils spared for rabi sowings in northern dry zone of Karnataka. Bajra farmers are advised to soak seeds in water for 10 hours and dry under shade and take up sowing in wider row spacing up to 135 cm. In case of bunch type groundnut, open conservation furrow after every 8th row. **However, there is need to take measures at appropriate level to keep the inputs like seeds ready for alternate contingency crops like bajra, red gram, sunflower, castor etc., after the cut-off date of 15th July for sowing.**

In **Central India**, as Chhattisgarh received rainfall during last fortnight and likely to receive rain during next fortnight also, nursery sowing of rice and sowing of soybean, black gram, green gram and maize may be undertaken. Early and medium rice varieties may be sown in lines as they mature 10-12 days earlier and don't require *biasi* operation. In Vidarbha region of Maharashtra, farmers are advised to prefer early hybrids/varieties of American/*Desi* cotton for sowing during first fortnight of July. Use 20% more seed rate and reduce intra-row spacing. Three tier intercropping of cotton:sorghum:pigeonpea:sorghum in 6:1:1:1 or 3:1:1:1 ratio is recommended. Sowing of greengram/blackgram with slightly higher seed rate as intercrops in cotton in 1:1 ratio is recommended. Transplanting of rice, sowing of cotton, soybean and pigeon pea may be taken up in Vidarbha region. As rain is also likely to occur in east Madhya Pradesh during second week of July, agricultural activities like nursery sowing of *kharif* rice, sowing of maize, soybean and jowar may be carried out.

In **West India**, conditions may become favourable for sowing of *kharif* crops like cotton, soybean, red gram, jowar, sunflower, bajra, groundnut, green gram and black gram in Madhya Maharashtra, cotton, soybean, red gram, jowar, sunflower, green gram and black gram in Marathwada, In Marathwada region, apply trash mulch to sugarcane and residue mulches for orchard crops. In medium deep to deep black soils of Madhya Maharashtra, instead of sole crops of sunflower, redgram, greengram or blackgram, farmers are advised to take up intercropping of sunflower:redgram in 2:1, pearl millet:redgram in 2:1, soybean:redgram in 2:1, redgram:greengram in 1:3, redgram:blackgram in 1:3 ratios. In shallow and medium deep black soils, pearl millet:horsegram in 2:1 or pearl millet:mothbean in 2:1 ratios are suggested. In Konkan, in view of occurrence of good rainfall and likely occurrence of rainfall during next fortnight, there is good progress in transplanting of rice and finger millet.

Due to non-receipt of rainfall during June, in Ahmedabad, Anand, Dahod, Kheda, Panachmahal, and Vadodar districts of Gujarat, cotton and other crops could not be sown. Under this situation and expected rainfall during the period, contingent crops like cotton (Deshi Hybrid: Deshi hybrid-7, Deshi hybrid-9, Guj. Cot-13, Guj. Cot-21, Anand Deshi Cot-1), and recommended varieties of maize, paddy, soybean, black gram, green gram, cowpea, pigeon pea, castor, pearl millet could be sown. In the rest of the districts of the region, still there is time to sow the normal crops.

In **Northwest India**, as there is likely occurrence of rainfall in Jammu & Kashmir, Himachal Pradesh, Uttarakhand, and some parts of Uttar Pradesh, agricultural activities like transplanting of rice and sowing of maize in Jammu & Kashmir, nursery / direct sowing of rice, sowing of maize and green gram in Himachal Pradesh, transplanting of rice and sowing of sorghum, millets, groundnut, soybean and pigeon pea in Uttarakhand, sowing of pigeon pea, maize, guar, bajra, sowing of jowar and maize and sowing of black gram, green gram in east Uttar Pradesh may be carried out. Farmers may wait for sufficient rain for sowing in remaining parts of northwest India.

There is probability of revival of monsoon from second week of July over many parts of the country. The agricultural situation in Gujarat, Interior Karnataka and major parts of Maharashtra needs to be monitored continuously and preparation may be taken up for adoption of contingency plan and arrangements may be made accordingly for availability of sufficient seeds and other inputs for agricultural operations.