



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

Valid for 9th to 22nd June, 2017

Date of Issue: 9th June, 2017

Issued by

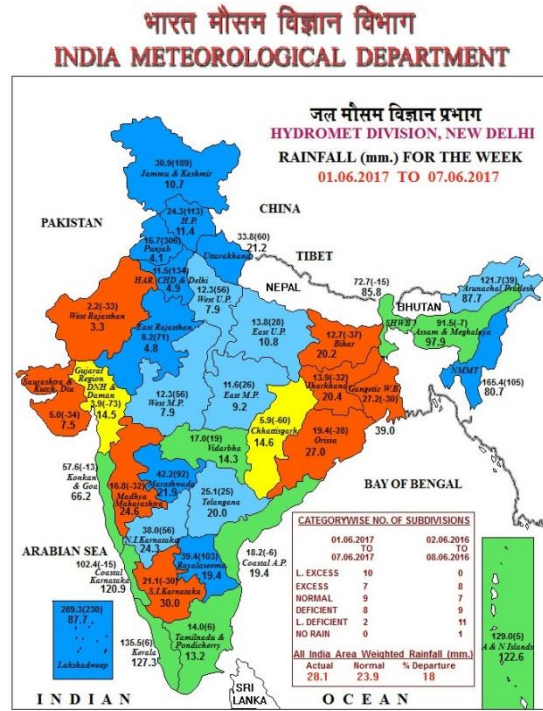
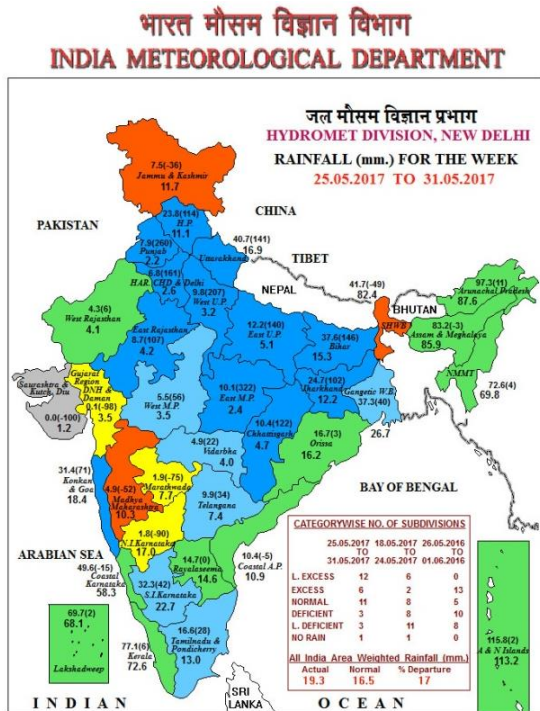
**Earth System Science Organisation
India Meteorological Department**

&

**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

(25th May to 7th June 2017)



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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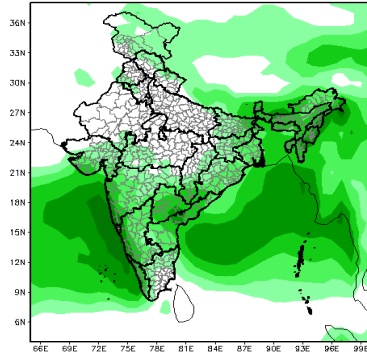
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 (b) Small figures indicate actual rainfall (mm.), while bold figures indicate Normal rainfall (mm.)
 Percentage Departures of Rainfall are shown in Brackets.

- Normal or above normal rainfall occurred during last two weeks in Himachal Pradesh, Uttarakhand, Punjab, Haryana & Delhi, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Konkan & Goa, Vidarbha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram, Tripura, Andhra Pradesh, Telangana, Coastal Karnataka, Kerala and Tamil Nadu.
- Normal or above normal rainfall occurred in either of the last two weeks in Jammu & Kashmir, West Rajasthan, Bihar, Jharkhand, West Bengal, Odisha, Chhattisgarh, Marathwada and Interior Karnataka.
- Below normal rainfall or no rain occurred in the last two weeks over Madhya Maharashtra and Gujarat.

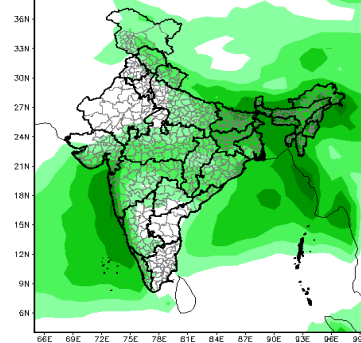
Extended Range Forecast System

Districtwise rainfall forecast and anomaly maps for the next 2 weeks (IC =7June)

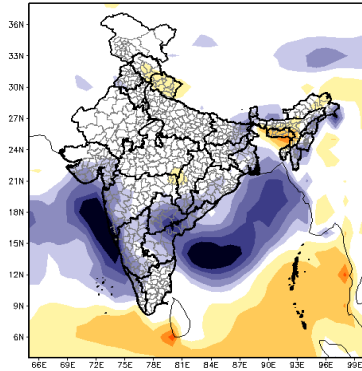
MME Weekly Rainfall (mm/day)
(Week1: 09Jun-15Jun)



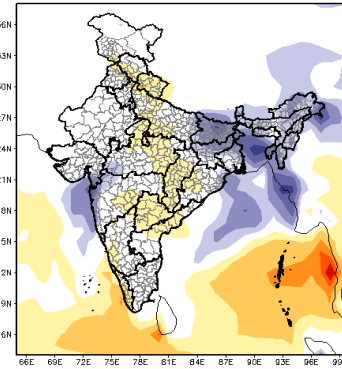
MME Weekly Rainfall (mm/day)
(Week2: 16Jun-22Jun)



MME Weekly Rainfall Anomaly (mm/day)
(Week1: 09Jun-15Jun)



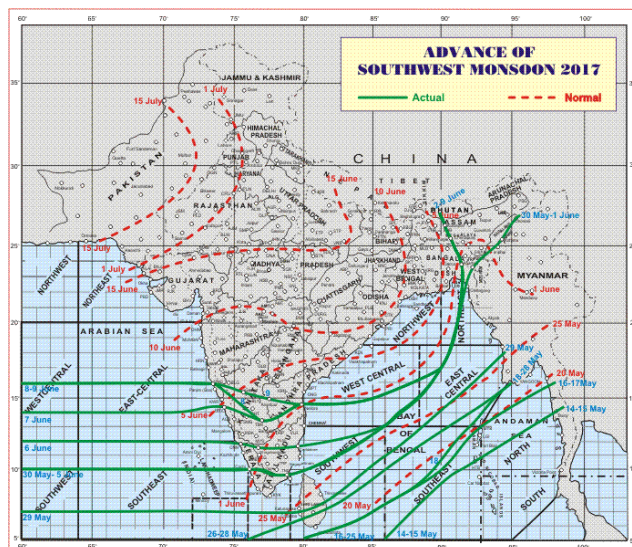
MME Weekly Rainfall Anomaly (mm/day)
(Week2: 16Jun-22Jun)



- Extended Range Forecast (ERF) indicates that the rainfall belt during week 1 (9-15 June) is likely to progress northward over the west coast and adjoining regions (Konkan & Goa, Madhya Maharashtra, Marathwada, South Gujarat) as and also over the eastern coastal states of India (West Bengal, eastern parts of Jharkhand and eastern parts of Bihar, coastal and adjoining central parts of Odisha, Andhra Pradesh, Telangana and South Chhattisgarh).
- During week 2 (16-22 June), rainfall belt will be mainly over the NE states, WB, Jharkhand and Bihar and west coast (particularly over Konkan and Goa and adjoining regions). The remaining parts of India are likely to witness below normal rainfall.

Advance of Southwest Monsoon - 2017

9th June, 2017



- Southwest Monsoon has further advanced into some more parts of Konkan, Interior Karnataka, Rayalaseema and Coastal Andhra Pradesh. The Northern Limit of Monsoon (NLM) passes through Lat. 16°N / Long. 60°E, Lat. 16°N / Long. 65°E, Lat. 16°N / Long. 70°E, Vengurla, Gadag, Anantapur, Nellore and Lat. 15°N / Long. 85°E, Lat. 17°N / Long. 90°E, Lat. 20°N / Long. 91°E, Agartala, William Nagar, Kokrajhar and Lat. 27°N / Long. 90°E.
- Favorable conditions are developing for further advance of southwest monsoon into some more parts of Konkan, Interior Karnataka, Rayalaseema and coastal Andhra Pradesh; some parts of Madhya Maharashtra, central & north Bay of Bengal, Tripura, Assam & Meghalaya and some parts of West Bengal & Sikkim during next 2-3 days.

Strategic Agricultural Planning based on rainfall during next two weeks till 22nd June

Salient Agromet Advisories

- There were good pre-monsoon showers and monsoon rainfall over Kerala, North-eastern states, Coastal Karnataka, South Interior Karnataka, Rayalaseema, Konkan and southern parts of Coastal Andhra Pradesh during previous fortnight, which is likely to continue during succeeding week. This facilitates sowing of kharif crops in Kerala, North-eastern states, Coastal Karnataka, South Interior Karnataka, Rayalaseema and southern parts of Coastal Andhra Pradesh.
- Prevailing weather conditions are favourable to continue agricultural activities like land preparation /sowing of kharif crops in West Bengal, eastern parts of Bihar, Jharkhand, Odisha; Madhya Maharashtra, Marathwada and Vidarbha subdivisions of Maharashtra, Telangana, North Interior Karnataka, remaining parts of Coastal Andhra Pradesh, Gujarat, Chhattisgarh and Madhya Pradesh.
- In view of good pre-monsoon and monsoon showers over Kerala, Tamil Nadu, Coastal & South Interior Karnataka, North-eastern states, Konkan, Rayalaseema and southern parts of Coastal Andhra Pradesh and monsoon showers likely to continue over these regions during next fortnight, following Agromet advisories are issued for above regions.

Kerala

Rainfall

- During 01.06.2017 to 07.06.2017, Northern zone of Kerala received rainfall of 125.2mm against the normal of 156.4mm (20% deficit). Southern zone of Kerala received 171.4mm against the normal rainfall of 111mm (54% surplus). Central zone of Kerala received rainfall amounted to 152mm against the normal of 124mm (23% surplus). High range zone of Kerala received 59mm against the normal rainfall of 109mm (46% deficit) and Problem Area Zone of Kerala received 220mm against the normal rainfall of 141.3mm (56% surplus). Even though an average rainfall is received in Kerala but deficit in rainfall is seen at high ranges (Idukki, Wayanad) and north zone of Kerala (Kasargod, Malappuram).

Paddy : Preparation of seeds:- To prevent seed borne diseases, treat the seeds with Bavistin (@ 2g per kg of seeds) or with Pseudomonas @10g/kg of seeds sowing

- For broadcasting the seeds: plough the lands after applying lime@350kg/ha and after two weeks. apply rotten and well dried powder of FYM (@5t/ha) and thoroughly mix with the soil.
- For transplanting (for raising the nursery):- Apply dried and powdered farm yard manure or compost while preparing the nursery @1kg/m² and thoroughly incorporate to the soil.
- Transplanting of *Viruppu* rice in Southern Zone, transplanting of rice (Uma and Kanchana variety) in Central Zone, nursery sowing of *Viruppu* rice in Northern Zone and wet sowing of rice in the Problem Areas Zone of Kerala utilizing the realized rainfall, with proper drainage facilities.
- Coconut: The climate is suitable for transplanting of coconut seedlings Take pits of size 1m x 1m x 1m. In laterite soils 1.2m x 1.2m x 1.2m sized pits are required. Fill 1/3 portion of the pits with a mixture of topsoil, powdered FYM and wood ash taken in equal proportion. Dig a small pit in the middle of this and plant the seedling, and strengthen it by compacting the soil surrounding the basal nut portion of the seedlings. Care should be taken not to fall any soil in crown of the seedlings. Provide prop to avoid tilting off of seedlings. Protect the plants from bright sunlight during the initial period of its growth. Bunds should be provided at the banks of the pits to prevent and collection and stagnation of runoff water in the pits.
- Arecanut: Ensure good drainage in the gardens. Prune the shade trees surrounding the palms and ensure good light penetration in the gardens. Application of 100gm potash per palm, in addition to the normal dose also is recommended. There is a chance of leaf and inflorescence rot, Apply Bordeaux mixture (1%) to the inflorescences and leaves.
- Banana: If infestation of pseudostem weevil is noticed, drench the leaf axils and bore holes on pseudo stem with Chlorpyrifos 2 ml/L or Quinalphos 2 ml/L. For sigatoka, give alternate sprays of Mancozeb (2 g/L) and carbendazim (1 gm/L). Three to four sprays at fortnightly intervals shall be given.
- Pepper: As prophylactic measure against wilt disease, apply 150 gram of Trichoderma enriched. Neem cake - cow dung mixture in the basins of the vines and incorporate thoroughly with the soil.
- Vegetables: There is a chance of powdery mildew attack in vegetables. Application of Mancozeb @ 3g/L or Trichoderma 2g/l is effective.

Tamilnadu

- Nursery sowing of Kuruvai rice over Western and Cauvery Delta Zones in Tamil Nadu.

Karnataka

Rainfall

- State actual rainfall for 23rd week i.e., 02nd June to 08th June 2017 was 29.0 mm as against the normal of 37.0 mm with (-) 22 % deviation. Whereas SIK received 14.0 mm of rainfall as against the normal of 21.0 mm leading to (-) 34 % deviation.

Field preparation

- Ploughing across the slope will make insitu soil moisture conservation and undertake land levelling so that more rain water is conserved in the soil.
- Undertake land preparation and strengthen the bund with fodder grass which will facilitate conservation of rainwater due to pre-monsoon showers. Ploughing across the slope will make insitu soil moisture conservation.
- Undertake land levelling so that more rain water is conserved in the soil.
- Agro forestry on the bund involving Melia dubia (Hebbevu), Silver oak and Causurina is recommended for sustainable income under abnormal extreme rainfall events.
- The farmers are procure good quality of seeds and fertilizers. Take up the germination test for Kharif sowing.
- The following crops are suggested for kharif sowing.
- Under monocropping the long duration crops
 - Redgram: TTB-7, BRG-1, 2, 4 & 5,
 - Castor: DCS-9 (Jyothi), DCH-177& 32
- Under double cropping the short duration crops:
 - Ragi: Indaf -9, ML-365, Sesamum: Navile-1, T-7, Groundnut: TMV-2, JL-24, KCG-6, Cowpea: TVX-944, KBC-1, Green gram: PS-16, PDM-84,178, Black gram: Karagao-3, T-9, Rashmi (LBG-625)
- Completion of nursery sowing of rice. Transplanting of rice in Coastal Karnataka.
- Drill sowing of rice in Hill Zone of Karnataka, with proper drainage facilities.
- Sowing of pulses like cowpea, green gram, black gram, horse gram, field bean; sowing of kharif crops like red gram, maize, ragi, groundnut, sesame, rice, sunflower, jowar and cotton and castor in districts of South Interior Karnataka with receipt of sufficient rainfall.

Andhra Pradesh

Rainfall

- During the period 01.06.2017 to 08.06.2017, Coastal AP received 32.7 mm rainfall against the normal rainfall of 18.3 mm (79%), Rayalaseema received 38 mm rainfall against normal rainfall of 22.7 mm (67%). Andhra Pradesh state received 35.3 mm (81%) rainfall against normal rainfall of 19.6 mm during 01.06.17 to 08.06.17. During this period, Srikakulam (-38%), Nellore (-24%) received deficit rainfall, Vizianagaram (-18%) received normal rainfall, Vishakhapatnam (149%), East Godavari (121%), West Godavari (70%), Krishna

(306%), Guntur (289%), Prakasam (81%), Chittoor (99%), Kadapa (28%), Ananthapuramu (57%), Kurnool (75%) districts received excess rainfall.

Field preparation and sowing

- Utilizing the available soil moisture, Farmers are advised to take up sowing of green manure crops like Sunnhemp or Daincha in paddy fields in north coastal, Godavari, Krishna, Guntur districts.
- Farmers can take up sowing of Sesame in North Coastal AP (Srikakulam, Vizianagaram and Vishakhapatnam), Krishna and Godavari districts with realised rainfall (high yielding varieties: Hima, Sarada (YLM 66).
- Sowing of Rice nurseries in Srikakulam, Vizianagaram, East and West Godavari, Krishna and Guntur districts.
- With the good rainfall received during the week and further forecast of advance of monsoon to Rayalaseema and Coastal AP, Farmers are advised to go for sowing of rainfed crops like maize, bajra, redgram, greengram, blackgram, cotton, groundnut in Krishna and Godavari zone and maize, bajra, ragi redgram, greengram, blackgram, groundnut in North coastal AP (except Srikakulam and Vizianagaram where there is deficit rainfall).
- With the rainfall received during the week, prepare field for sowing of rainfed crops like Bajra, Sorghum, Redgram, Greengram, Blackgram, Castor in Chittoor, Nellore, Kadapa, Kurnool and Ananthapuramu districts.
- Groundnut sowings can be taken up in Chittoor, Nellore and Kadapa and under assured irrigation in Kurnool and Ananthapuramu districts and from 1st July onwards under rainfed conditions in Kurnool and Ananthapuramu districts.

Telangana

- Land preparation for sowing of rainfed crops soybean, Jowar, maize, red gram, green gram, cotton etc.

Maharashtra

- Nursery sowing of kharif rice and ragi in Konkan.
- Direct sowing of rice in Konkan and Kolhapur region of Maharashtra.
- Land preparation / sowing pearl millet, groundnut, pigeon pea, sunflower, jowar and soybean etc. in Madhya Maharashtra.
- Land preparation / sowing of Kharif crops like rice, soybean, cotton, tur and moong etc. in Vidarbha.
- Land preparation / sowing of pigeon pea, green gram black gram, groundnut and maize, nursery preparation for kharif onion in Marathwada. varietal information for this region is as follows;

Soybean

- For sowing of soybean crop use MAUS-71(Samrudhi), MAUS-81 (Shakti), MAUS-18, MAUS-162, MAUS-612 etc. varieties developed by VNMKV, Parbhani.

Kharif sorghum

- Hybrid varieties like CHS-14, CSH-16, CSH-25 (Parbhani Sainath) and improved varieties like PVK-400, SPV-960 (Panchali), CSV-15, SPV-946, PVK-801, PVK-1333 (Parbhani Shweta), PVK-809, SPV-1474) etc. select for sowing of Kharif sorghum.

Pearl millet

- Hybrids (GHB-558, Saburi, Shardha, Shanti, AHB-1666, PKV-Raj), Improved varieties (ICTP, AIMP-92901 (Samrudhi), PPC-6 (Parbhani Sampada), ABPC-4-3 and local varieties (Ambika, Terna, Prabhavati (Parbhani-1), Sugandha, Parag, Parbhani Avishkar) may select for sowing of pearl millet crop.

Vegetable

- For cultivation of kharif vegetable crops like Brinjal, chilli and tomato seed should be sown on raised bed.

Pomegranate

- Incidence of disease (oily spot) is more in Mrig bahar (June-October) to reduce infestation remove infected plant parts destroy them properly

Sapota

- Infestation of phytophthora disease is more after rainy season. To reduce infection take a spray of bordopest 1% before start of rainfall and during rainy season take a spray of Metalaxil + Mancozeb 2 gm per litre of water.

East and West Madhya Pradesh

Rainfall

- From June 01, 2017 pre-monsoon rain occurred in many districts of eastern and western MP. Higher rain occurred in Raisen (28 mm), Indore (89 mm), Khandwa (43 mm), Rewa (23 mm), Satna (33 mm), Jabalpur (41 mm), Sagar (435 mm), Damoh (41 mm), Datia (44 mm), Gwalior (25 mm), and Betul (29 mm) districts. Rain also occurred in fewer amount in the remaining districts of the state during the previous week, and it was more than normal in almost all the districts.

Field preparation and sowing

- Construction of bunds and blocking of open channels in the rice field
- Constructing drainage channels in the soybean field.
- Preparing raised beds before sowing for soybean crop
- Broadcasting of last dose of urea followed by irrigation in sugarcane
- Nursery preparation for sowing of pigeonpea seeds in selected pockets
- Farmers are advised to collect the seeds for sowing of kharif crops like soybean, rice, maize, and cotton in the state

Bihar

Rainfall

- During 31.5.2017 to 7.6.2017, scanty rainfall was observed in almost all districts of Bihar except in a few districts like Sitamarhi, Patna, Rohtash, Bojpur, East & West Champaran, where good rainfall was recorded.

Progress in *Kharif* sowing

- Due to very good rainfall during the month of May, optimum soil moisture favoured sowing

of *kharif* maize and seed bed preparation for long duration paddy varieties. Till now, almost 75 per cent nursery sowing of long duration rice has been completed.

Field operations and sowing

- Farmers are advised to complete the nursery sowing of long duration rice variety.
- Farmers may also sow the seeds of medium duration rice varieties such as Sita, Santosh, Saroj, Rajshri, Prabhat, Rajendra suhasni, Rajendra kasturi and Rajendra bhagwati in North Bihar region. Before sowing, seed should be treated with Carbendazim@2.0 gram/kg of seed.
- Nursery preparation is advised for kharif onion. For healthy and strong seedlings, application of FYM/compost is advised during nursery preparation. Agrifound Dark Red (ADR), N-53, Bhima super, Arka kalyan are recommended varieties for sowing in North Bihar region. Farmers are advised to arrange the seeds from reliable sources.
- Farmers are advised to sow kharif maize. Devki, Suwan, Shaktimaan-1, Shaktimaan-2, Rajendra shanker makka-3 and Ganga 11 varieties of maize are recommended for sowing in North Bihar.
- Ploughing of litchi orchard is advised after harvesting of litchi fruits. After ploughing, application of 60-80 kg compost, 2.5 kg urea, 1.5 kg Single Super Phosphate (SSP), 1.3 kg Murate of potash and 50 gram borax per adult litchi plant is advised.

North Eastern States

- Nursery sowing of Sali rice in Assam. Continuesowing of maize. In Central Brahmaputra Valley zone, complete sowing of jute.
- In high rainfall zones of Assam, farmers can prepare nursery beds for transplanted Sali rice. Rice cultivars Jalashree and Jalkuwari are recommended for sowing in flood prone areas.
- Sowing of maize in high and mid altitudes and nursery sowing and land preparation for transplanting of Sali rice in Meghalaya.
- Transplanting of finger millet and nursery sowing of rice, sowing of cowpea, French bean, soybean in Arunachal Pradesh.
- Arrangement of drainage facilities in green gram fields to manage soil borne root diseases in Nagaland.
- Nursery raising for main kharif rice. Undertake main land preparation for transplanting of rice. Sowing of kharif maize, soybean, groundnut and black gram in Manipur. Community nursery in upland areas so that it may be least affected with the heavy rains. Undertake land preparation for transplanting of rice.
- Transplanting of pre-kharif rice in Mizoram.
- Field preparation and sowing of maize in upland and medium upland and sowing of groundnut in Tripura.

Advisories for other regions

- Nursery preparation for kharif rice in Chhattisgarh.
- Direct sowing of rice in Bastar Plateau Zone of Chhattisgarh.
- Nursery sowing of rice, land preparation for sowing of direct seeded upland rice and for sowing of maize in Jharkhand.

- Land preparation / sowing of medium duration crops like groundnut, arhar, cotton in Odisha.
- Nursery sowing for kharif rice in South Gujarat. Land preparation for sowing of kharif cotton, groundnut, sesame, pearl millet, black gram, green gram, cowpea and pigeon pea in north Gujarat.

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