



National Agromet Advisory Service Bulletin

based on

Extended Range Weather Forecast

Valid for 18th September to 1st October 2015

Date of Issue: 18th September 2015

Issued by

Earth System Science Organisation
India Meteorological Department

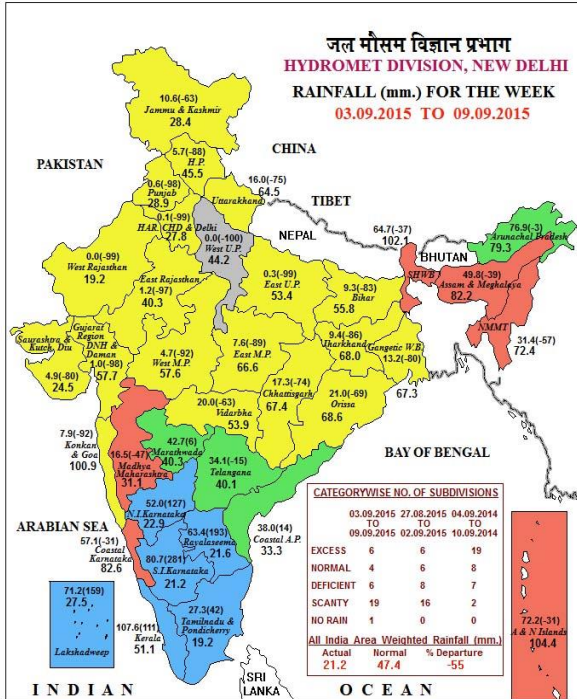
Indian Institute of Tropical Meteorology, Pune

&

Indian Council of Agricultural Research
AICRPAM, CRIDA, Hyderabad

Realized Rainfall (3rd to 16th September 2015)

भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT

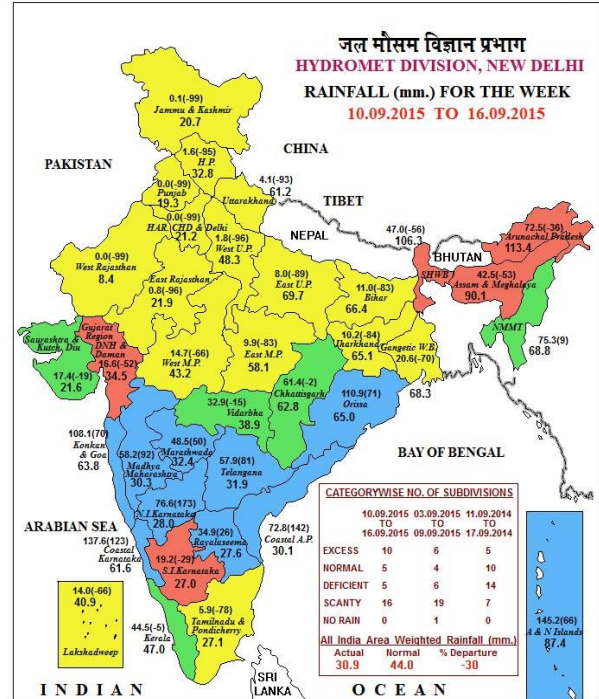


LEGEND: ■ EXCESS (+20% OR MORE) ■ NORMAL (+19% TO -19%) ■ DEFICIENT (-20% TO -59%)
■ SCANTY (-60% TO -99%) ■ NO RAIN (-100%) ■ NO DATA

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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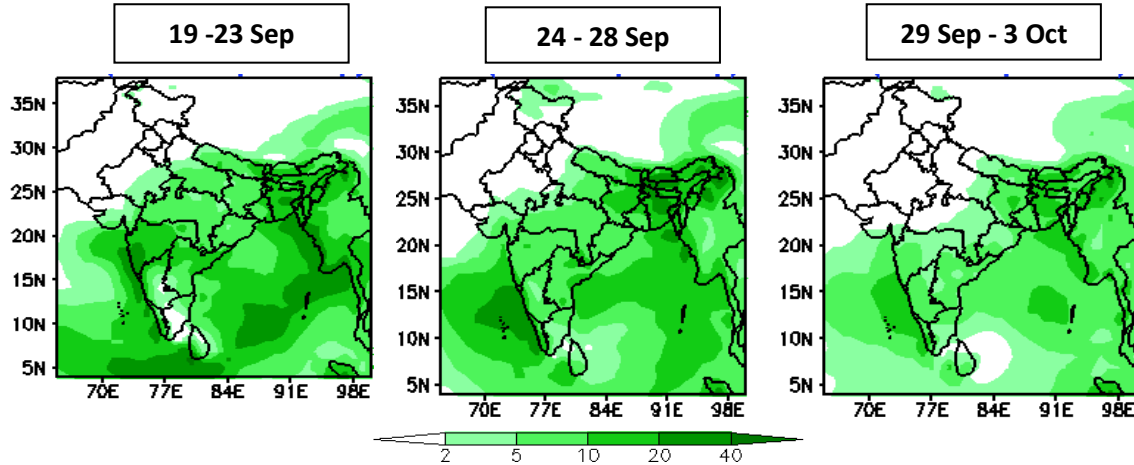
- Normal or above normal rainfall occurred during last two weeks in Marathwada, Andhra Pradesh, Telangana, North Interior Karnataka and Kerala.
- Normal or above normal rainfall occurred in either of the last two weeks in Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura, Saurashtra & Kutch, Madhya Maharashtra, Vidarbha, Konkan & Goa, Chhattisgarh, Odisha, South Interior Karnataka, Coastal Karnataka and Tamil Nadu.
- Below normal rainfall occurred in the last two weeks over Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Haryana & Delhi, Rajasthan, Uttar Pradesh, Assam & Meghalaya, West Bengal & Sikkim, Bihar, Jharkhand, Gujarat region and Madhya Pradesh.

Extended Forecast System (based on CFS model)

Forecast based on IC = 13th September, 2015

Rainfall forecast for 3 pentads

Rainfall forecast (mm/day) (18 September – 1 October, 2015)



- Rainfall activity is likely to improve over southern peninsula and parts of central India for the next 10 days.
- Moderate to heavy rainfall is expected over parts of Maharashtra, west-coast and east-coast till the end of this month.

Strategic Agricultural Planning based on rainfall during next two weeks till 1st October

Good rainfall occurred over Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura, Maharashtra, Saurashtra & Kutch, Chhattisgarh, Odisha, Andhra Pradesh, Telangana, Karnataka, Kerala and Tamil Nadu during last fortnight. The withdrawal line of southwest monsoon continues to pass through Amritsar, Hissar, Ajmer and Barmer.

Over the regions like **Marathwada**, **North Interior Karnataka** and **Madhya Maharashtra**, either sowing of crops was poor or the already sown crops have experienced moisture stress situation due to deficient rainfall during earlier weeks. However, most parts of these regions received good rainfall during last couple of weeks which may be beneficial for taking early *rabi* crops.

There are reports of floods in some districts of **Assam** during last week and in **Gangetic West Bengal** during first week of August due to heavy to very heavy rainfall.

Rainfall activity may improve over southern peninsula, parts of central India and Northeast India during next 10 days. Heavy rainfall is expected over Gujarat, Konkan and Goa and Madhya Maharashtra during first pentad (19 – 23rd September). Whereas, moderate rainfall is expected over Gujarat and Konkan and Goa during later part of next fortnight. Moderate rainfall is also expected over remaining parts of Maharashtra, Madhya Pradesh, East Uttar Pradesh, Bihar, Jharkhand, Odisha, Andhra Pradesh, Telangana, Kerala, Karnataka and northeastern States during next fortnight. However, not much rain will occur over remaining parts of the country.

In consideration of poor rainfall situation in Marathwada, North Interior Karnataka, Madhya Maharashtra, Rajasthan, Gujarat State and Uttar Pradesh during earlier weeks, receipt of good rainfall during last couple of weeks and likely occurrence of good rainfall in Marathwada, North Interior Karnataka and Madhya Maharashtra, following agricultural activities are suggested.

Marathwada

- Early *rabi* crops may be undertaken in view of recently occurred and likely occurrence of good rainfall.
- Preparation of fields and sowing of early *rabi* jowar, sunflower and safflower.
- Maintenance of 5-7 cm water level in transplanted rice.
- Rain water harvesting in unsown areas and water reservoirs.

North Interior Karnataka

As there is improvement in rainfall situation in North Interior Karnataka due to good rainfall during last couple of weeks and likely occurrence of rainfall during next couple of weeks, following agricultural activities are suggested.

- Sowing of *rabi* crops like sunflower, sorghum, safflower and horse gram.
- Adoption for intercropping systems instead of sole crop, so as to overcome the failure of crops during soil moisture deficit situation. (*rabi* sorghum + chickpea (2:1 row proportion); chickpea + safflower (4:2 row proportion), wheat + safflower (7:1 row proportion)).
- Sowing of short duration, drought resistant crops and variety (*rabi* sorghum: Maldandi and Mugati; chickpea: A-1, JG-11, Jaki-9218; Safflower: A-1).
- Adoption of wider row spacing (120-135cm) in sunflower in rainfed situations.
- Sowing of fodder crops like jowar, maize, bajra in the North East Dry Zone and North East Transition Zone.
- Rain water harvesting in unsown areas and water reservoirs.

Madhya Maharashtra

- Maintenance of 5-7 cm water level in transplanted rice in Western Ghat (western parts of Sangli, Satara, Kolhapur, Pune, Ahmednagar, Dhule, Nandurbar and Nasik districts).
- Preparation of fields and sowing of early *rabi* jowar, sunflower and safflower.
- Rain water harvesting in unsown areas and water reservoirs.
- Follow proper soil and water conservation practices for in-situ water conservation in *rabi* season.

Uttar Pradesh

- Due to deficit rainfall in the region, spraying of 2% Urea in transplanted paddy.

East Uttar Pradesh

- In Central Plain Zone, completion of sowing of bajra, green gram, black gram and sesame and nursery sowing of cabbage, radish and tomato, nursery sowing / transplanting of capsicum, chilli, brinjal and cauliflower and sowing of potato, pointed gourd and parwal; arrangement of 5-7 cm water in rice fields; land preparation and sowing of toria (TA-9, Bhawani, PT-30 and PT-507), sowing of winter vegetables, tomato and high yielding varieties of radish (Kalyanpur No.1, Pusa Rashmi, Hisar Selection-1, Japani Safed, Pusa Chetaki, Pusa Himani, Pusa Deshi, Arka Nishant and Jaunpuri).
- In Eastern Plain Zone, arrangement of 5-7 cm water in rice fields; sowing of radish, spinach, toria, pea and potato (Kufri Chandramukhi, Kufri Sadabahar, Kufri Ashoka), transplanting of cauliflower, brinjal, cabbage and tomato, planting of sweet potato and parwal.
- Mulching should be done as to check the evaporation losses.
- Undertake intercultural operation to conserve soil moisture.

West Uttar Pradesh

- In Bundelkhand Zone, maintenance of 5 cm water in rice fields; light irrigation in groundnut,

soybean, sesame, vegetables and fodder crops.

- In Western Plain Zone, maintenance of 5 cm water in rice fields; sowing of toria (TL-67, TL-17) and transplanting of brinjal, tomato.

In view of occurrence of floods in Assam during end of July and third week of August and in Gangetic West Bengal during first week of August, following agricultural activities are suggested.

Assam

Due to continuous rain and flooding in Dhemaji, Lakhimpur, Tinsukia, Dibrugarh, Kokrajhar, Bongaigaon, Sonitpur, Barpeta, Jorhat, Goalpara, Morigaon, Cachar, Golaghat and Nagaon districts, standing crops have been affected.

- In North Bank Plain Zone of Assam, in flood affected areas –
 - Sowing of *kharif* sesame, green gram, black gram, early cauliflower and radish.
- Transplanting of finger millet, sowing of green gram (T44, Kopergaon, K851, ML56, ML131, SG1 (Pratap), SG21-5) and black gram (T9, T27, Pant U 19, T122, Saonia Mah (SB123), KU 301, USJD113) and winter vegetables in Lower Brahmaputra Valley Zone of Assam.
- Nursery raising of cole crops and early radish in North Bank Plain Zone and Central Brahmaputra Valley Zone.
- Nursery sowing of mid cauliflower and radish in Upper Brahmaputra Valley Zone.

West Bengal

12 districts in Bengal is flood-hit with heavy rain hitting the state in July and early August. Contingency measures for these areas have been mentioned below-

Post Flood Crop Contingency Plan:

- Surface water can be used for irrigation to upland crops and transplanted rice.
- Black gram (T9, Pant Urd 30 and Pant Urd 19), green gram (T44, Samrat), pigeon pea (Bahar, Pusa 9 and Narendra Arhar 1) and horse gram (DV 7, BR 5, BR 10, S67/26, 14, 31) can be sown with available seeds in locality/seed agencies.
- Sowing of oilseed crops (sesame, ground nut) in uplands.
- Raised bed planting method for chilli in low lying areas.
- In Coastal Saline Zone transplanting of winter vegetables and cultivation of radish, broccoli etc.
- In upland area where rice could not be cultivated, sowing of red *Amaranthus*, spinach, coriander etc., sowing of *vadukalai* like Kalindi and Swarna.
- There is a chance for stem fly infestation in vegetables due to low rainfall and partly cloudy weather. Spray Chlorpyrifos @ 25 ml per 10 litres of water.
- Prevailing cloudy weather is congenial for the incidence of downy mildew in cucurbits; spray Metalaxyl 8% + Mancozeb 64% @ 20 g in 10 litres of water.

Normal agricultural activities are continued over remaining parts of the country in view of receipt of good rainfall during the season.