# All India Coordinated Research Project on Agrometeorology (AICRPAM) ICAR-Central Research Institute for Dryland Agriculture Santoshnagar, Hyderabad-500059

### Status of monsoon, Progress in kharif Sowing and Agromet Advisories for some Deficit/Excess rainfall Areas

#### 1. Status of southwest monsoon

During 1 June -03 September, country as a whole received 709 mm rainfall, which is 4% deficit compared to the normal rainfall of the country for the same period (735 mm). Districts which received rainfall less than 50% of normal during 1 June - 03 September were identified and depicted in Figure 1, Table 2 & 3.

## 2. Progress in kharif sowing (Source: Press Information Bureau and Ministry of agriculture and Farmers' Welfare, Govt. of India)

The total sown area of major crops as on 03<sup>rd</sup> September, 2017 (as per reports received from states), stands at 1028 lakh hectare as compared to 1034 lakh hectare, as on this date last year (Table 1).

Table 1: Progress in kharif sowing in India as on 03<sup>rd</sup> September 2017 (Area in Lakh hectare)

| Crop           | Area sown in 2017-18 | Area sown in 2016-17 |
|----------------|----------------------|----------------------|
| Rice           | 366.3                | 372.03               |
| Pulses         | 137.61               | 143.08               |
| Coarse Cereals | 180.6                | 183.44               |
| Oilseeds       | 166.8                | 180.81               |
| Sugarcane      | 49.88                | 45.64                |
| Jute & Mesta   | 7.05                 | 7.56                 |
| Cotton         | 119.88               | 101.72               |
| Total          | 1028.14              | 1034.28              |

#### 3. Agromet Advisories

#### **Deficit rainfall areas**

#### Kerala

The state as a whole has received 1454 mm rainfall so far during the season, which is 20% deficit compared to the normal rainfall during the season. According to the extended

range weather forecast, deficient and excess rainfall is predicted over Kerala during September 1-7 and September 8-14, respectively.

- Vegetables: There are chances of occurrence of mites and trips in vegetables. Apply 8 ml Spiromesifen in 10 litre of water.
- Ginger/ Turmeric: Rhizome rot may attack on ginger and turmeric during this season. The affected plants should be dig out and treat with Kocide 2 gm per liter of water.
- Coconut/Arecanut: As a prophylactic measure to control bud rot, apply 1% Bordeaux mixture on the tender leaf axils.
- Banana: Erwinia rot disease may appear in the banana plantations. As a precaution, apply lime in the banana basin or bleaching powder in the irrigation channels.

#### Karnataka

The rainfall received from 1<sup>st</sup> Jun to 03<sup>rd</sup> September over north interior Karnataka is 317 mm against the normal of 370 mm, which is 14% deficit. However, south interior Karnataka received 433 mm against the normal of 530 mm, which is 18% deficit. Coastal Karnataka is under normal rainfall condition. The extended range weather forecast provided for next two weeks (1-7 September and September 8-14) for different subdivisions of Karnataka are: South Interior Karnataka: normal and excess; North Interior Karnataka: Scanty and Normal; Costal Karnataka: Scanty and Normal.

#### **South Interior Karnataka**

- As the normal to excess rainfall condition is forecasted for next two weeks, postpone the plant protection measure in next couple of days due to high wind speed, cloudy and medium rainfall weather.
- Stalking of vegetables may be carried out to avoid their lodging due to high wind and excess rainfall.
- The following crops are suggested for sowing in this month (August), wherever sufficient moisture is available

Medium to short duration crops like ragi (Indaf-5, GPU-26, 28, 45 & 48, PR-202), maize (Ganga, Deccan, Vijaya composite and Composite NAC), cowpea (KBC-1, TVX-944) and PKB-4 for vegetable purpose.

#### Maharashtra

Rainfall received in major meteorological sub-divisions of the state are as follows:

Vidarbha – 599 mm (26% deficit); Marathwada – 495 mm (9% deficit); Madhya Maharashtra-664 mm (12% surplus) and Konkan- 2685 mm (2% surplus)

The extended range weather forecast provided for next two weeks (1-7 September and September 8-14) for different subdivisions of Maharashtra are: Vidarbha (scanty and deficient);

Marathwada (scanty and normal); Madhya Maharashtra (scanty and normal) and Konkan (scanty and scanty).

#### Vidarbha

- Foliar spray of 2% Urea (200 g Urea +10 litre water) at flowering stage and 2% DAP at boll development stage is advisable for better productivity in cotton.
- Undertake harvesting of matured green gram crop with protected drying.
- To control the sucking pests in cotton, spray Azadirachtin 0.03% @ 30 ml or Acetameprid 20% SP@ 4.0 g or Thiamethoxam 25 wp @ 4.0 g per 10 litres of water.
- For control of girdle beetle in soybean, undertake spraying of Chlorantraniliprole 18.5% @ 3 ml SC or Profenofos 50% EC @ 20 ml or Ethion 50% EC @ 30 ml or Thiacloprid 21.7 % SC @ 15 ml or Triazophos 40% EC @ 12.5 ml per 10 litres of water.

#### Madhya Pradesh

The state as a whole has received 621 mm rainfall so far during the season, which is 23% deficit compared to the normal rainfall during the season. The extended range weather forecast provided for next two weeks (1-7 September and September 8-14) for different subdivisions of Madhya Pradesh are: West Madhya Pradesh (scanty and scanty); East Madhya Pradesh (scanty and scanty).

- There are chances of occurrence of semilooper, white fly and hairy caterpillar in soybean. As there is no rainfall forecasted for the next two weeks, the control measures can be taken.
- Weeds may appear as a result of alternate wetting and drying in direct seeded rice. The weeding and other interculture operation should be carried out.
- To control the blast disease of paddy, spray Carbendazim @ 2g per litre of water.
- There are chances of incidence of sucking pests in tomato, chilli, brinjal and okra. Spray Dimethoate @ 750 ml/ha in 500-600 litre of water at the interval of 10 days during the days of clear sky.

Note: The above is a general overview for the states. However, for further details, district level contingency plans prepared by ICAR-CRIDA [covering all farming situations within the district) and placed in the websites of the Department of Agriculture Cooperation & Farmers' Welfare, Government of India (www.agricoop.nic.in) and CRIDA (www.crida.in)] may be referred.

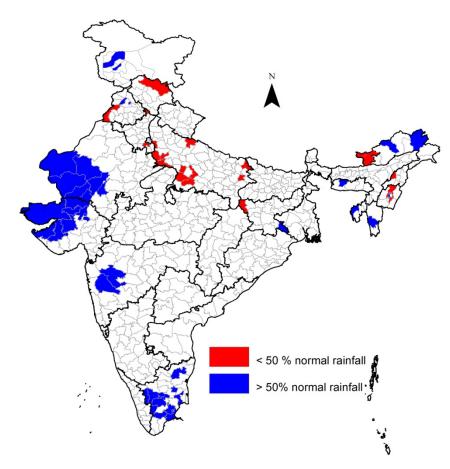


Figure 1: Districts received > 50% deficit and excess rainfall compared to normal during 1 June - 03 September 2017 (Prepared by AICRPAM based on the data provided by IMD)

Table 2: Districts which received more than 50% deficit rainfall compared to normal (1 June to 03 September 2017) (Source: IMD)

| s.<br>NO | MET. SUBDIVISION   | DISTRICT     | Period: (   | Period: 01-06-2017 to 03-09-2017 |           |  |
|----------|--------------------|--------------|-------------|----------------------------------|-----------|--|
|          |                    |              | ACTUAL (mm) | NORMAL<br>(mm)                   | %<br>DEP. |  |
| 1        | Arunachal Pradesh  | Tawang       | 474         | 2038.1                           | -77       |  |
| 2        |                    | West Kameng  | 934.4       | 2038.1                           | -54       |  |
| 3        | NMMT               | Wokha        | 381         | 1416                             | -73       |  |
| 4        |                    | Senapati     | 466         | 1090.5                           | -57       |  |
| 5        |                    | Thoubal      | 222         | 746.1                            | -70       |  |
| 6        | Jharkhand          | Garhwa       | 352         | 740.2                            | -52       |  |
| 7        | East Uttar Pradesh | Amethi       | 275.1       | 683.4                            | -60       |  |
| 8        |                    | Kanpur Dehat | 312.9       | 621.1                            | -50       |  |
| 9        |                    | Kushinagar   | 394.9       | 937.8                            | -58       |  |
| 10       |                    | Mau          | 374.7       | 797.5                            | -53       |  |
| 11       | West Uttar Pradesh | Agra         | 199.4       | 581.9                            | -66       |  |

| 12 |                  | Auraiya          | 268.3 | 576   | -53 |
|----|------------------|------------------|-------|-------|-----|
| 13 |                  | Gautambudhnagar  | 176   | 462.7 | -62 |
| 14 |                  | Hamirpur         | 289.1 | 658.4 | -56 |
| 15 |                  | Jalaun           | 285.7 | 635.2 | -55 |
| 16 |                  | Mahamayanagar    | 207.5 | 523.4 | -60 |
| 17 |                  | Mathura          | 224.3 | 494.2 | -55 |
| 18 |                  | Pilhibhit        | 369.8 | 814.2 | -55 |
| 19 | Har Cha Delhi    | Gurgaon          | 204.2 | 406.2 | -50 |
| 20 |                  | Palwal           | 174.6 | 369.9 | -53 |
| 21 |                  | Panchkula        | 348   | 801.1 | -57 |
| 22 |                  | North East Delhi | 249.5 | 548.1 | -54 |
| 23 | Punjab           | Firozpur         | 56.3  | 298.7 | -81 |
| 24 | Himachal Pradesh | Lahul&Spiti      | 117.7 | 371   | -68 |

Table 3: Districts which received more than 50% surplus rainfall compared to normal (1 June to 03 September 2017) (Source: IMD)

| S.<br>NO | MET. SUBDIVISION    | DISTRICT            | Period: 01-06-2017 To 03-09-2017 |                |           |
|----------|---------------------|---------------------|----------------------------------|----------------|-----------|
|          |                     |                     | ACTUAL (mm)                      | NORMAL<br>(mm) | %<br>DEP. |
| 1        | - Arunachal Pradesh | Lower Dibang Valley | 3087.5                           | 820.5          | 276       |
| 2        | Arunachai Pradesh   | Upper Subansiri     | 1088.2                           | 643.3          | 69        |
| 3        | Assam & Meghalaya   | East Garo Hills     | 2759.5                           | 1376.5         | 100       |
| 4        |                     | Dimapur             | 1323.8                           | 683.8          | 94        |
| 5        | ] <del></del>       | Imphal West         | 2075.8                           | 833.1          | 149       |
| 6        | NMMT                | Lunglei             | 3643.3                           | 1491.7         | 144       |
| 7        |                     | West Tripura        | 1844.9                           | 1173.5         | 57        |
| 8        | Jharkhand           | Purbi Singbhumi     | 1294.8                           | 864.5          | 50        |
| 9        | Jnarknand           | Ramgarh             | 1317.9                           | 847            | 56        |
| 10       | Punjab              | Kapurthala          | 597.5                            | 355.4          | 68        |
| 11       |                     | Bandipore           | 271                              | 138.3          | 96        |
| 12       |                     | Baramula            | 354                              | 207.4          | 71        |
| 13       | Jammu & Kashmir     | Ganderwal           | 268.1                            | 157.3          | 70        |
| 14       |                     | Pulwama             | 201.2                            | 118.9          | 69        |
| 15       |                     | Riasi               | 1935                             | 1121.2         | 73        |
| 16       |                     | Barmer              | 459.1                            | 209.8          | 119       |
| 17       |                     | Jaiselmer           | 225.6                            | 140.9          | 60        |
| 18       | West Rajasthan      | Jalor               | 884.8                            | 342.4          | 158       |
| 19       |                     | Jodhpur             | 383.1                            | 237.2          | 62        |
| 20       |                     | Pali                | 775                              | 388            | 100       |
| 21       | East Rajasthan      | Rajsmand            | 669.6                            | 440.2          | 52        |
| 22       |                     | Sirohi              | 1784.3                           | 754.2          | 137       |
| 23       | Cuiarat             | Banaskantha         | 1127.3                           | 482.1          | 134       |
| 24       | Gujarat             | Gandhinagar         | 1145.5                           | 604.2          | 90        |

| 25 |                            | Mahesana         | 840.3  | 550.8 | 53  |
|----|----------------------------|------------------|--------|-------|-----|
| 26 |                            | Patan            | 908    | 444.2 | 104 |
| 27 |                            | Botad            | 635.3  | 412.2 | 54  |
| 28 |                            | Devbhoomi Dwarka | 615.9  | 379.8 | 62  |
| 29 |                            | Jamnagar         | 665.2  | 444.6 | 50  |
| 30 | Saurashtra & Kutch         | Kachchh          | 470.2  | 307.4 | 53  |
| 31 | Saurasnira & Kulch         | Morbi            | 943.8  | 428.8 | 120 |
| 32 |                            | Rajkot           | 767.8  | 494.9 | 55  |
| 33 |                            | Surendranagar    | 831.1  | 415.6 | 100 |
| 34 |                            | Diu              | 1006.4 | 588.6 | 71  |
| 35 | Madhya Maharashtra         | Ahmadnagar       | 487.3  | 311.7 | 56  |
| 36 | ividuliya ividilalasiiti'a | Pune             | 1078.2 | 714.7 | 51  |
| 37 | Chhattisgarh               | Kabirdham        | 1208   | 743.4 | 62  |
| 38 |                            | Coimbatore       | 334.5  | 124.3 | 169 |
| 39 |                            | Dindigul         | 284.7  | 176.5 | 61  |
| 40 |                            | Karur            | 233.4  | 116.3 | 101 |
| 41 |                            | Perambalur       | 341.8  | 172.7 | 98  |
| 42 |                            | Ramanathapuram   | 155    | 94    | 65  |
| 43 | Tamilnadu &                | Sivaganga        | 430.2  | 209.2 | 106 |
| 44 | Pondicherry                | Teni             | 210    | 92.7  | 127 |
| 45 |                            | Thanjavur        | 346.3  | 214.9 | 61  |
| 46 |                            | Tiruppur         | 195.4  | 84.9  | 130 |
| 47 | 7                          | Tiruvannamalai   | 535.9  | 312.8 | 71  |
| 48 |                            | Virudhunagar     | 248.3  | 114.1 | 118 |
| 49 |                            | Puduchery        | 415    | 270.3 | 54  |