Central Research Institute for Dryland Agriculture Hyderabad

Status of monsoon and contingency plans for some rainfall deficit areas

Onset of South-West monsoon during 2014 was delayed by a week and has set over Kerala on 6th June. Its further progression was also delayed due to unfavorable conditions over Bay of Bengal and Arabian sea. The northern limit of monsoon on 7th July is passing through Veraval, Surat, Nashik, Wshim, Damoh, Lucknow, Aligarh and Bikaner. Monsoon did not cover Gujarat, western parts of Madhya Pradesh and parts of Rajasthan and in these areas; the monsoon was delayed by almost 20 days. During 1st June to 6th July, the country as whole experienced deficit rainfall (-43% departure from normal). The rainfall was deficit by 46% over North-West India, 64% over Central India, 41% over Southern peninsula and by 20% over East and North-East India.

Sowing window for major crops of the country still facilitates sowings to be carried out normally. Arrangements may be made for the supply of seed of region specific contingency crops, in case the monsoon fails to revive during the next week. Sowings may be taken up only after the receipt of sufficient rainfall (above 50mm over 2-3 days).

Maharashtra

The rainfall was deficit by 66% in Vidarbha, 80% in Marathwada, 72% in madhya Maharashtra, and 65 in Konkan and Goa. Farmers in dry region of central Maharashtra region are advised not to sow greengram, blackgram and cowpea beyond 1st week of July. Instead they can sow pearlmillet, pigeonpea and sunflower. Pigeonpea cultivars AKT 8811, Vipula and PKV-Tara may be sown at a reduced spacing of 90x20 cm. In central Maharashtra, beyond 1st July, pearlmillet + pigeonpea (2:1) intercropping is suggested instead of sole crops. In Marathwada region try to adopt intercropping systems (Cotton + Soybean, Bajra + Pigeon pea, Soybean + Pigeaon pea etc) for minimizing risk. In Konkan region Sowing of early rice varieties like Ratnagiri-73, Ratnagiri-24, Ratnagiri-1, Karjat-3, Ratnagir-5 etc. on upland and mid-land rice field. In Solapur after 1st July, green gram, black gram cow pea should be omitted.

Karnataka

Rainfall was deficient by 35-70% in different districts of northern Karnataka. They are advised not to sow blackgram and greengram at present. Sowing of crops with very low water requirement like horsegram, foxtail millet and castor in Bijapur, Bagalkot and Gadag districts are suggested. Sowing of pearlmillet:pigeonpea in 2:1, pearlmillet:groundnut in 2:4, pearlmillet:castor in 2:1, kharif sorghum:redgram in 5:1 is suggested in these districts. In red soils of Haveri, Belgaum and Dharwad districts sowing of ragi, castor, cowpea, horse gram, sunflower, groundnut, pigeonpea and amaranthus is suggested whenever sufficient rainfall is received during next fortnight. In black soils of these districts, sowing of cotton, chilli, tobacco, transplanted chilli, maize, sunflower, groundnut, niger and groundnut is recommened.

Chhattisgarh

Rainfall over Chhattisgarh was deficit by 53%. Deficit ranged between 6-87% amont different districts. Farmers are advised to go for line sowing in rice crop. In case farmers want to sow rice by broadcast biasi method, a lesser seed rate @60-80 Kg./ha should be used. Farmers are advised that nursery sowing should be done where irrigation facilities are available by saghan Chalai method so that this nursery can be used for gap filling and maintaining the plant population afterwards. Early and medium duration varieties of rice should be sown in lines, these will not require biasi operation and mature 10-15 days earlier.

Bihar

State received good amount of rain during 1st week of July and 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. Farmers may avoid sowing long duration rice varieties. In Jehanabad, Aurangabad, Nalanda and Gaya districts maize, onion and nursery sowing of medium duration hybrid rice varieties suggested. In uplands areas of these districts and Saharsha, Purniya, and Katihar districts only short duration rice varieties are recommended.

Rajasthan

Rainfall was deficit by 67% over western and 77% over eastern parts. Farmers are advised to take up sowing of short duration crops and varieties with the receipt of good rainfall (about 30 mm or more). In southern parts, sowing of maize varieties Navjot, PEHM-2, Pratap Makka-3 and Pratap Makka-5 may be done upto 10th July. Intercropping of maize+blackgram (2:2) or maize+greengram (1:1) in maize growing region is suggested. Seed priming of maize (0.1% thiourea) for 6 hrs should be done before sowing. Prefer intercropping of Groundnut variety JL-24 or Pratap mungphali-2 with sesamum at 6:2 row ratio. Sorghum varieties (CSH-6, CSH-14, Pratap jowar 1430, CSV-17, CSV015, CSH-13, CSV-13, RJ-96) may be used at 25% higher seed rate. In eastern and western parts, only short duration varieties of Bajra (HHB-67, Improved, RHB-121, RHB-90 and Raj-171) can be sown up to 20th July as these mature in 65-80 days.

Gujarat

Rainfall was deficit by 91% over Gujarat, and by 77% over Saurashtra and Kutch. Farmers are advised to conserve rain water in situ conditions by adopting cultivation practices across the slope and forming a deep furrow at an interval of 10-12" in lines. For south and middle Gujarat region, sunflower (cv. Modern and EC-68414 and Guj-1), sesamum (cv.Guj.Tal 1,2, 10), blackgram (cv.T-9, Guj, Udid-1), greengram (cv.GM-4, K-851, Meha) and cowpea (cv. Guj. Cowpea 1,2,4, Pusa Falguni) is suggested. For Saurashtra region, erect types groundnut (GG-2,5,7) are recommended.

Note: The above is a general overview for the states. However, ICAR (CRIDA) has prepared district level contingency plans (covering all farming situations within the district) and placed in the websites of the Ministry of Agriculture & Cooperation, Government of India (www.agricoop.nic.in) and CRIDA (www.crida.in) for further details.