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Status of monsoon and contingency plans for some rainfall deficit areas

During 1st June to 27th July, the country as a whole experienced 25% deficit SWM rainfall. The rainfall was deficit by 38% over North-West India, 21% over Central India, 24% over Southern peninsula and by 24% over East and North-East India.

Gujarat

The rainfall over the entire state of Gujarat was deficit by about 42% and only 38% of the normal area is covered so far under various crops. Cereals in 9%, pulses in 15%, oil seeds in 40% and other crops in 50% of their normal area are sown. Farmers are advised to take up the following contingent crops and varieties in view of delay in the commencement of season.

South and Middle Gujarat region:

- In soybean, cv. Guj. Soybean1, 2, JS-335.
- In bajra, cv.GHB-744, GHB-538,732 transplant only three weeks old nursery.
- Short duration oilseeds crops: sunflower (cv. Modern and EC-68414 and Guj-1) and Sesame (cv. Guj. Tal 1,2, 10) may be undertaken; Pulse crops like: Blackgram (cv. T-9, Guj. Udid-1), greengram (cv. GM-4, K-851, Meha), cowpea (cv. Guj. cowpea 1,2,4, Pusa Falguni); Grain Sorghum (cv. GJ-35,36 and 37) and Fodder sorghum (cv. S-1049, C-10-2, Gundari, GFS 4,5).
- In Baroda and Panchmahal districts, paddy cv. GR 5, 8 ,9, Sathi 34-36, IR-28, ADR-1 and Sukhvel-20 may be drilled.

North Gujarat Region

- Sesamum (cv. Guj. Tal 1,2, 10), Sunflower (cv. Modern, EC 68414), Fodder sorghum (cv. S-1049, C-10-2) may be sown.
- In bajra, cv.GHB-744, GHB-538,732 transplant only three weeks old nursery.

Saurashtra region

- Blackgram- cv. T-9, Guj. Udid-1; Greengram-GM-4, K-851, Meha; Sorghum cv. CSH-6 and CFS-4 for fodder purpose; Guar-Guj. Gaur 1 and 2 specifically for Kutch region
- Sesame-Purva-1; Cotton-G. cot-13, 21, 23, V-797; Pigeonpea cv. BDN-2,ICPL-87,GT-100, GT-101, Vaishali.

Maharashtra

In Madhya Maharashtra rainfall was deficit by 31%, in Marathwada by 59%, in Vidarbha by 16% and in Konkan & Goa by 24%. In Vidarbha region, sowings of cotton and soybean are in progress. In Amravati division 34% (11.1 lakh ha) and in Nagpur division 36.2% (6.64 lakh ha) of their normal

sowing area has been covered. After cessation of rainy weather and under workable field conditions, the following contingency crop planning is suggested for Vidarbha region.

- Avoid sowing of cotton.
- Avoid sowing soybean beyond 25th July. In case farmers prefer to sow soybean then, JS-335, JS 93-05, JS 95-60 varieties are suggested.
- Prefer soybean+ pigeon pea intercropping (2:1 or 4:2 or 6:1 or 9:1).
- While sowing pigeonpea as sole crop, prefer AKT-8811, Vipula, PKV-Tara, BSMR 736 varieties and adopt closer spacing (60x20cm).
- In eastern Vidarbha, direct sowing of early and mid late maturing paddy varieties may be taken up by wet seeding method wherever the nursery is not ready.
- Sowing alternative crops like sunflower (TAS 82, PKV SF-9, PKVSH-27, KBSH 1 and KBSH 44), Pearl millet (PKV Raj, Shradha and Saburi) Sesame (AKT-64 and JLT-7), Castor (AKC-1, GCH-4,5,6, DCH-117,32), and pearl millet+ pigeonpea (2:1 or 4:2), sunflower+ pigeonpea (2:1), sesame+ pigeonpea (4:1) intercropping systems is suggested till 15th August.

Rajasthan

In west Rajasthan monsoon rainfall was deficit by 41% and in east Rajasthan by 37%. Sowings are in full swing after receipt of recent rainfall in south and eastern parts of Rajasthan.

- Sowing of maize and sorghum crops may be avoided and instead blackgram, green gram, clusterbean and sesame are suggested.
- Maize and sorghum can be sown for fodder and improved varieties for maize (fodder) or African Tall, Pratap Makka Chari-6, and for Sorghum (fodder): Rajasthan Chari-1, Rajasthan Chari-2, Pratap Chari-1080, SSG-59-3.
- Improved varieties in clusterbean like RGC-936, blackgram (RBU-38, T-9), green gram (SML-668, K851), Sesame (RT-46, RT-125) may be preferred.
- Intercropping of Groundnut cv. JL-24, Pratap mungphali-2 with sesame at 6:2 row ratio is suggested.

Andhra Pradesh and Telangana

In coastal area of Andhra Pradesh, rainfall was deficit by 45% and in Rayalaseema only by 17%. In Telangana rainfall deficit by 52%. In Andhra Pradesh of the 41.70 lakh ha of normal sown area, about 30% of area (12.45 lakh ha) has been covered under different crops. In Telangana, about 23.30 lakh ha (58% of the normal kharif season area of 40.38 lakh ha) has been covered.

- Direct seeding of paddy may be taken up with short duration varieties under dry conditions and later converted to wet paddy after receipt of good rainfall.
- Direct sowing of paddy is suggested for Srikakulam and Krishna districts.
- In canal commands in coastal areas of AP, direct sowing of paddy upto July and transplanting of paddy upto 15th of August is suggested.
- In NSP command areas of Nalgonda, Guntur, Krishna and Prakasam districts as water levels in reservoirs are very low and release of water in canals is not certain, farmers are advised to take up rainfed crops like maize, cotton, redgram, greengram.

- In Prakasam district, adopt closure spacing in cotton and redgram and form dead furrows for moisture conservation.

Bihar

In Bihar the rainfall was deficit by 21% and transplantation of paddy in low and medium lands, sowing of redgram and blackgram in uplands are in progress.

- Transplanting of paddy may be avoided beyond 31st July under upland conditions.
- Crops like blackgram (T-9, Navin), redgram (Bahar, Pusa-9, Narendra Arhar-1, Malvia-13), sweet potato (Rajendra mishrikand-11) are suggested for uplands in place of paddy.
- If good rainfall receives before 15th August, short duration paddy varieties such as Turanta, Prabhat, Saket-4 may be transplanted in medium and low lands.
- Intercropping of maize (Suwan, Deoki, Shaktiman-1, 2) + blackgram (T-9, Pant U-31, Pant U-19) is also recommended for uplands.

Karnataka

South Interior Karnataka received sufficient rains during the last week where as rainfall over coastal Karnataka was deficit by 23% and over north interior Karnataka rainfall deficit was 26%. In northern Karnataka there are likely chances of drought conditions to commence and hence farmers are advised to complete sowings of onion, sesame, maize, sunflower, niger, castor, bajra, groundnut (spreading), redgram, desi cotton, navane, horse gram, cowpea crops and adopt the following agronomic measures while sowing.

- Bajra: Soak the seeds in water for 10 hours and dry under shade and sow in wider row spacing up to 135 cm.
- Groundnut (Spreading type): Open up conservation furrow after every 8th row for moisture conservation.
- Pigeonpea: Soak seeds in CaCl₂ solution (2%) for 1 hour and dry under shade for 7 hours and then treat seed with rhizobium @ 500g/10kg seed .
- Niger: Soak the seeds in water for 6 hours and dry under shade, then treat seeds with thiram/captan @ 3g/kg seeds.
- Intercropping of pearl millet + pigeonpea (2:1), pearl millet + castor (2:1), kharif sorghum + redgram (5:1), redgram + sesamum (1:2 or 2:4); redgram + horsegram (2:1) is suggested to minimize the drought risk.
- Low water requiring crops like horsegram, foxtail millet and castor crops may be preferred keeping in view the prevailing deficit rainfall conditions.

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.