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Status of monsoon and contingency plans for some rainfall deficit areas

Onset of South-West monsoon during 2014 was delayed by a week and monsoon has set over Kerala on 06th June. Its further progression was also delayed due to unfavorable conditions over Bay of Bengal and Arabian sea. The northern limit of monsoon on 29th June is passing through Veraval, Surat, Nashik, Wshim, Damoh, Sultanpur, with a delay of almost 15 days. Rainfall in the country as a whole is deficit by 43% as on 29th June. The rainfall activity was deficient by 53% over North-West India, 60% over central India, 37% over southern peninsula and it was deficit by 27% over East and North-East India. During the last fortnight, parts of Kerala, coastal Karnataka, Konkan & Goa, North-Eastern states, West Bengal, Bihar, Jharkhand, Chhattisgarh, Vidarbha and Odisha received moderate rainfall.

Sowing window for major crops of the country still facilitates sowings to be carried out normally. Even though, the situation is not alarming, arrangements may be made for the supply of seed of region specific contingency crops, in case the monsoon fails to revive during the next fortnight. Sowings may be taken up only after the receipt of sufficient rainfall (above 50mm over 2-3 days) and making soil sufficiently moist.

Karnataka

Farmers in Northern Dry Zone are advised not to take up sowing of green gram and black gram now. They are advised to keep the land fallow in areas where double cropping had been planned in medium to deep black soils. Soil and moisture conservation techniques such as compartment bunding, ridges and furrows across the slope are suggested for medium and deep black soils spared for rabi sowings. Farmers are advised to soak Bajra seeds in water for 10 hours and dry under shade and take up sowing in wider row spacing up to 135 cm. In case of bunch type groundnut, open conservation furrow after every 8th row. Soak the pigeonpea seeds in CaCl₂ solution (2%) for 1 hour and dry under shade for 7 hours before taking up recommended seed treatment. In case of niger, soak the seeds in water for 6 hours and dry under shade, then treat seeds with thiram/captan @ 3g/kg seeds. In south interior Karnataka, farmers are advised to provide life saving irrigation to crops sown already.

Maharashtra

In Vidarbha region of Maharashtra, farmers are advised to prefer early hybrids/varieties of American/*Desi* cotton for sowing during first fortnight of July. Use 20% more seed rate and reduce intra-row spacing. Three tier intercropping of cotton:sorghum:pigeonpea:sorghum in 6:1:1:1 or 3:1:1:1 ratio is recommended to minimize the risk. Sowing of greengram/blackgram with slightly higher seed rate as intercrops in cotton in 1:1 ratio is recommended. In Marathwada region apply trash mulch to sugarcane and residue mulches for orchard crops. In medium deep to deep black soils of Madhya Maharashtra, instead of sole crops of sunflower, redgram,

greengram or blackgram farmers are advised to take up intercropping of sunflower:redgram in 2:1, pearlmillet:redgram in 2:1, soybean:redgram in 2:1, redgram:greengram in 1:3, redgram:blackgram in 1:3 ratios. In shallow and medium deep black soils, pearlmillet:horsegram in 2:1 or pearlmillet:mothbean in 2:1 ratios are suggested.

Bihar

In uplands avoid paddy and sow sesamum (cv.Krishna) or Arhar (cv. Bahar/Narendra, pusa-9, Arhar-1,Malviyal-3) or intercrop of maize (cv.Suwan) and urad (Pant U-31). Short (Turanta, Prabhat, Richhariya, Dhanlakshmi, Saket) or medium duration (Sita, Kanak, IR-36, Santosh) paddy varieties are suggested, in place of long duration varieties for medium and low lands.

Gujarat

In south and middle Gujarat region, wherever canal water is available, farmers may take up paddy (cv.GR-8,9 or Gurjari), fodder sorghum (cv. S-1049,C-10-2) and sunflower (cv. EC 68414). Sowing of early maturing hybrid *Bt* cotton and intercrop of pearl millet:pegionpea in 2:1 ratio is suggested. In tobacco growing areas, land may be prepared for nursery.

Uttar Pradesh

For parts of central UP, farmers are advised to select medium duration varieties of paddy (cv.Sarjoo-52, cv.Narendra-359, cv.Pant-4, cv.Pant-10). In upland conditions, direct seeding of short duration paddy (cv.NDR-97, cv. Barani, cv.NDR-118, cv.Saket-4) with sprouted seedlings by drum seeder may be taken up. Treat the 15-day old paddy nurseries with 2% solution of N with potash.

Andhra Pradesh and Telangana

Avoid rainfed cultivation of cotton and soybean in light soils of Telangana. In already raised paddy nurseries avoid application of nitrogen, if the transplanting gets delayed. Remove $1/3^{rd}$ population of pulses and oilseeds (excluding groundnut) if they are facing drought due to break monsoon.

West Bengal

Farmers are advised to keep ready seed material of local varieties of lentil, lathyrus and pegionpea as contingency crops for break monsoon 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.