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Status of monsoon and contingency plans for deficit areas of the country

During last 2-3 days, good rainfall occurred in Madhya Pradesh, Uttar Pradesh, Uttarakhand and Himachal Pradesh. Scattered rains have occurred in north east, Bihar, West Bengal, Marathwada, Vidharbha, Chhattisgarh, Orissa and Andhra Pradesh, etc. Regions which are under serious deficit conditions are Saurashtra & Kutch, Haryana, Punjab, Western Rajasthan, Madhya Maharashtra and South interior Karnataka. When we consider the total districts in the country as on 27th July, 94 districts out of 626 have received scanty rainfall and 306 districts are under deficit. However, the crop sowings have affected in about 150 districts seriously. The following contingency measures are suggested for each of these deficit states/regions:

Rajasthan

- The state as a whole received 30% deficit rainfall till date. In eastern Rajasthan maize sowing has been undertaken with rains in July first fortnight. However, thereafter, there has not been much improvement. Jhunjunu and Sikar are the worst affected in this region. In these regions, in the already sown maize/pearl millet/pulse crops only moisture conservation measures through interculture and weeding to conserve the soil moisture are recommended. In western Rajasthan, the situation is quite grim with five districts, viz., Jaisalmer, Badmer, Jodhpur, Bikaner, Nagaur receiving scanty rainfall. Pearlmillet, clusterbean and moth bean are the major crops in this region. Upto end of July, short duration varieties of pearlmillet (HHB-67), moth bean (RMO-40, RMO-225), sesame (RT-125, RT-46), Cluster bean (RGC-936) and fodder bajra are recommended whenever adequate rainfall occurs. Beyond 31st July, short duration pulses and fodder pearl millet are only possible. In case of late sowing, increase seed rate by 10-15 per cent in green gram, black gram and sesame.

Gujarat

Majority districts of Saurashtra & Kutch region received highly deficit to scanty rainfall and reeling under severe drought. The situation in other parts of Gujarat is also not encouraging. However, because of more irrigated area, the sowings are completed in about 50% of the area till date. In central Gujarat, Vadodara, Gandhinagar, Patan, Broach are the worst affected, while in Saurashtra and Kutch, more than 70% deficit is seen in Amreli, Surendranagar, Jamnagar, Junagadh, Purbandar and Kutch. Kutch received only 5% of the rainfall so far.

- Farmers of Saurashtra & Kutch region are advised to avoid groundnut, cotton and pearl millet sowing now. Instead green gram (GM-4, K-851), sesame (Purva-1) and fodder sorghum (GFS-4, GFS 5, S-1049) are recommended for rainfed cultivation as soon as adequate rainfall occurs. Short duration castor hybrids like GCH-8 can be planted upto 31st July. In already sown cotton and groundnut crops, inter culture operations and weeding to conserve moisture are recommended. 2% thio urea spray helps in stress mitigation.
- In districts with shallow soils, pulse crops like Blackgram (cv. Gujarat-1) , greengram (Gujarat-4), sesame (GT-2, GT-3) and fodder jowar can be sown upto 15th August as soon as adequate rainfall occurs.
- In north Gujarat, clusterbean (HG-75, GG-1) and castor (GCH-2, 4, 5, 7) can be sown upto end of July.
- The tobacco growing farmers of middle Gujarat are advised to irrigate tobacco nursery twice a day.

Haryana

Haryana is experiencing 70% rainfall deficit. All districts except Gurgaon, Ambala, Panchkula and Sirsa are under the scanty category. In irrigated districts, adopt DSR when rainfall is scanty and weeds to be controlled through weedicides. Intermittent drying in paddy to conserve irrigation water. In south west part of state, most of the area is rainfed. Only about, 25% of the area was sown so far. Bajra, cluster

bean and moong are the major rainfed crops. Till end of July, short duration bajra hybrids (HHB 67, HHB 216 and 226) and clusterbean varieties (HG 365, HG-563 and HG-75) can be sown as soon as rainfall occurs. In cotton and sugarcane already sown, interculture and weeding operations are to be taken up to conserve soil moisture.

Punjab

In irrigated districts, practices like timely weed control and intermittent drying will save on water requirement. However, in rainfed area (Kandi region), the sowing of fodder Pearl millet varieties like PHBF 1, PCB-164 and FBC-16 can be done up to August. For grain purpose, pearl millet varieties like PHB 2, PCB 164 and PHB 47 can be sown up to last week of July.

Madhya Maharashtra

In Maharashtra, Vidharbha and Marathwada regions received relatively better rainfall and the crop conditions is also satisfactory. Regularly scattered rains are occurring in all districts which are keeping the crops alive except Jalna. Vidharbha region as a whole received near normal rainfall and crop situation is satisfactory. In Madhya Maharashtra, however, large areas remain unsown and the condition of the already sown crops is also poor particularly in Sangli, Pune and Jalgaon. The following contingency planning is recommended in this region.

- In deep black soils of Solapur sow pigeonpea + coriander (1:2), pigeonpea+*Shepu* (1:2), pearl millet+pigeonpea (2:1). Farmers are advised to sow pigeonpea + coriander (1:2) in medium to deep black soils.
- In the standing bajra, blackgram, greengram and cotton interculture operations may be done to conserve soil moisture.
- In Satara region, Shraddha, Saburi, Shanti varieties of pearl millet are recommended to sow in shallow grey/black soil; Bhanu, Phule Raviraj varieties of sunflower in medium and deep black soils.

- In Sangli region farmers can sow intercrops groundnut (JL-286/JL-24)+pigeonpea (Vipula) in shallow lateritic soils; Sunflower (SS-56/Bhanu); . Sunflower (SS-56/Bhanu)+pigeonpea (Vipula/BDN-708) in 2:1 ratio are recommended for sowing.

South Interior Karnataka

South Interior Karnataka is still reeling under 39% rainfall deficit conditions. The worst affected districts are Hassan, Chamrajnagar, Mandya, Kodagu and Tumkur.

- Farmers are advised to sow improved varieties of finger millet (Indaf-Sand 9; GPU-28) up to the end of July. Maize (cv. Deccan-103, NAC-6002 and NAH-2049) and Sunflower (Modern, BSH-1) may be sown in place of groundnut. In view of the delay, only medium duration varieties (BRG-1 and BRG-2) of redgram for vegetable purpose may be sown upto end of July.
- In already sown crops, interculture with blade harrow may be carried out and urea (1%) may be sprayed for 2 to 3 times to boost plant growth.

Kerala

Kerala state this time recorded upto 40% deficit rainfall. The state mostly grows plantation crops like coconut, rubber, pepper and cardamom. Pepper and cardamom crops are facing drought conditions which may impact the yields. Providing life saving irrigation where possible or mulching to conserve soil moisture in basins is recommended.

Other States

The situation in other states is comparatively normal. However, there are some districts which recorded deficit rainfall. For such districts, the district level contingency plans are made available in the websites of the Ministry of Agriculture (www.agricoop.nic.in), ICAR (www.icar.org.in) and CRIDA (www.crida.in). The respective KVKs also may be contacted for needful advice.