Central Research Institute for Dryland Agriculture Hyderabad

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

During this week, monsoon was active in all parts of Andhra Pradesh, Bihar, Jharkhand, Marathwada, parts of Vidharbha, Tamil Nadu and Gangetic West Bengal. Rayalaseema in particular received very good rains. North Karnataka which is so far reeling under drought also received moderate sowing rains on 17th and 18th July. The regions which are still under deficit are Saurashtra and Kutch, Haryana and Punjab, Madhya Maharashtra and South interior Karnataka. The contingency measures suggested for the deficit regions are as under:

Andhra Pradesh

The entire state received adequate rainfall and as such no contingency measures are required in the state except paddy nurseries are to be protected with ground water where canal water is not released due to poor rains in the catchment area.

Karnataka

Rainfall on 17-18th July covered almost all districts of northern Karnataka.

- In all regions with adequate moisture, farmers are advised to sow sesame, maize, sunflower, niger, castor, bajra, redgram, cotton, horsegram, cowpea, groundnut (spreading) and vegetables like onion, cucumber and ridge gourd. Intercropping systems like Bajra + Groundnut (bunch type) (2:4), Bajra + Redgram (2:1), Maize/Groundnut (bunch) + Redgram (4:2), Kharif sorghum + Redgram (5:1), Redgram + Sesame (1:2 or 2:4), Redgram + Horsegram (2:1) or Chilli + Desi cotton are suggested to avoid losses in case of further rainfall deficits at the end of kharif season.
- In already sown crops remove weeds and excess seedlings within the row to conserve soil moisture.
- In shallow soils with sub-optimum soil moisture, farmers are advised to go for fodder crops like fodder bajra, maize, cowpea and horsegram in place of regular grain crops.

South interior Karnataka is still under deficit rainfall. Many districts have not received sowing rains and he rainfall where occurred has been highly scattered.

- Finger millet is the main crop in this region. It has a sowing window upto end of July and even beyond. No change is suggested in all those regions.
- Farmers are advised to sow maize (Nityakshari, NAC-6004) and sunflower (Morden, BSH-1) in place of groundnut upto end of July.
- In case of redgram, farmers are required to go for medium duration varieties like BRG-1 and BRG-2 in place of regular long duration varieties.

Tamil Nadu

Tamil Nadu as a whole has received satisfactory rainfall in all the zones. As such no major contingency is required.

Maharashtra

In Maharashtra, Vidarbha and Marathwada regions received adequate rains except in few districts.

- As such normal cropping pattern is suggested in the Vidarbha region. However, in areas where the crops have not still been sown, soybean and pigeonpea are recommended in place of sorghum and cotton. In pigeonpea reduced spacing of 90x20 is recommended.
- Madhya Maharashtra is however under deficit rainfall. In this region sole crops
 of pigeonpea and pearl millet are to be avoided in view of the delay in onset of
 rainfall. Instead pearl millet (Shanti) + pigeon pea (Vipula) in 2:1 ratio in shallow
 grey soils and soybean (JS-9305, DS-228, JS-335) + pigeon pea (Vipula) in 6:2
 ratio in medium deep black soils is suggested.
- In Marathwada region also few districts did not receive sowing rains. In such areas whenever adequate rainfall occurs, intercropping systems of cotton + soybean or pearl millet + pigeonpea or soybean + pigeonpea are recommended instead of sole crops till 25th July.

Rajasthan

Eastern Rajasthan received adequate rains in the last one week and in most places the crop sowing is in progress where maize crop has not been planted due to poor rainfall. Farmers are advised to go for bajra (HHB-67 and RSB-173) up to 20th July. Other crops like moth (RMO-40 and RMO-225), sesame (RT- 46 and RT-125), green gram (RMG-62 and K-851) and cluster bean (RGC-936) may be sown till the end of the month whenever soil moisture is available.

Gujarat

Saurashtra and Kutch region is under deficit rainfall conditions.

- Cotton sowing may be avoided now in this region
- Farmers are advised to sow semi-spreading types of groundnut (GG-2, GG-5 and GG-7) at a spacing of 45 to 60 cm.
- Castor (GAUCH-1, GCH-6) or fodder sorghum (GFS-4, S-1049) or short duration varieties in greengram (GM-4) and blackgram (Guj, Udid-1, T-9) may be sown up to the third week of July in place of sesame.

Bihar

Moderate and widespread rainfall has occurred during the last week which improved the situation significantly, but there is large variability in its spatial distribution even within a district.

- In upland areas, sesame (Krishna) and intercrop of maize (Suwan) and black gram (T-9, Pant U 19, Pant U 31) may be sown in place of paddy.
- In low land situation, paddy varieties *viz.*, Swarna sub-1, BBT-5204, MTU-7029, MTU-1001and in medium lands Prabhat, MTU-1010, Narendra-97 and Rajendraswetha are recommended.

Haryana

In Haryana, some areas are under rainfed agriculture where sowing rains are not received yet. In these areas whenever some rains occur, the following are recommended:

- Farmers are advised to sow, with adequate soil moisture, short duration varieties of bajra (HHB-67-Improved, HHB-216 and 226) and in guar crop varieties like HG-563 and HG-365.
- Intercultural operations and weeding may be carried out to conserve soil moisture.

Other States

In Orissa, Chattisgarh, Jharkhand, West Bengal and Assam, rainfall is fairly widespread and as such the regular cropping pattern need to be followed except the flood affected districts of Assam for which the contingency plan was already suggested. Punjab is largely irrigated.

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), for all states of peninsular India, Maharashtra, Gujarat and Rajasthan. These plans are placed in the website of the Ministry of Agriculture (www.agricoop.nic.in) and CRIDA. The details of all crops, short and medium duration varieties to be used in case of delayed onset along with management practices are available in these plans district wise.