Central Research Institute for Dryland Agriculture Hyderabad

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

During the last three days entire Rajasthan state received heavy rainfall. North Gujarat and parts of Punjab have also received scattered rains giving relief to the standing crops, reducing water demand and lowering the temperatures. Under these conditions contingency plan for deficit/excess regions is provided below:

Rajasthan

During last two three days the entire state received moderate to heavy rains, the recent rains have substantially reduced the rainfall deficit of west Rajasthan from -49% (two days before) to -29% (as on 16th August) and in east Rajasthan the seasonal rainfall has become normal (-7%).

- In southeastern part of the state due to very heavy rainfall in some districts the crops are inundated. Farmers are advised to drain out excess water in standing maize, sorghum, pulses, soybean immediately. Drainage is very important for pulses and soybean as they are susceptible to water logging.
- In South Rajasthan top dressing of urea in maize and sorghum crops is recommended to take advantage of the abundant moisture available.
- In West Rajasthan, where kharif crops have not been sown with the recent rains, farmers are advised to keep the land fallow and conserve the moisture to take up the early rabi crops like Toria/Taramira/mustard/chickpea depending on the soil type.

Karnataka

From 1st June to 16th August 2012, state as a whole received 415 mm rainfall against the normal of 593 mm with a deficit of -30%. Though scattered rains have occurred, the drought situation still persists both in South and North Karnataka with deficits of 32 and 29% respectively.

North interior Karnataka

- In North Karnataka Desi cotton (*Herbacium*) as sole or intercropping with onion + chilli, maize, sunflower (Seed hardening soaking in calcium chloride (30 gm in 1.5 lit water to treat one kg of seed) solution for 6 hrs before sowing, wider row spacing 120-135 cm), horsegram, moth bean and cowpea can be taken up to end of August.
- In place of other kharif grain crops, fodder maize, cowpea and horsegram are advised to be sown in light soils for fodder up to 31st August.
- Interculture, mulching and weeding operations are advised in standing crops.
- Making of compartmental bunds in vertisols which are currently under fallow, so that adequate moisture is conserved for the rabi crops.

South interior Karnataka

- In unsown areas, sowing of short duration finger millet varieties (Indaf-5, Indaf-9, GPU-28 ad GPU-48) can be taken up up to 20th August. However, transplanting of finger millet is recommended up to 15th September.
- Sowing of minor millets like fox tail millet and little millet can be taken up to end of August and cowpea (TVX-994, KBC-1 and KBC-2) and field bean (HA-3 and HA-4) are recommended to be sown from first week of September to end of September.
- Maize (Deccan 103) and fodder maize (South African) and sunflower (Morden, BSH-1) are recommended in all the traditional groundnut growing areas till 20th August.
- In tank fed areas, aerobic rice cultivars (MAS-946-1, Rasi and KRH-2) may be sown whenever the tanks are completely full and medium duration redgram varieties (BRG-2) can be cultivated for vegetable purpose.

Maharashtra

The Maharashtra state as a whole received 629 mm of rainfall from 1st June to 16th August. As on 13th August sowing was completed in 128.63 lakh ha amounting to 97% of the normal crop area.

Madhya Maharashtra

- In medium deep to deep black soils of Solapur region, sowing of sole crops like sunflower (Bhanu, Phule, Raviraj), castor, horsegram, pearl millet (shradha, Saburi, Shanti) can be sown upto 20th August.
- To meet the fodder shortage, farmers are advised to sow giant bajra or sorghum (Phule ruchira, Phule amrutha) in light soils upto end of August.

- In shallow black/red soils of Sangli region pearl millet (Shanti, Shradha, Saburi) and in deep black soils, sole crop of sunflower (Bhanu, SS-56) are suggested up to 20th August.
- In Kolhapur region in medium deep black soils sowing of fodder maize (African tall, Panchganga, Gangasafed-2, Vijay, Local) are recommended up to 20th August.
- In Nasik region, farmers are advised to sow pearl millet (Shanti, Shradha, Saburi) in shallow red soils and in medium red / black soils maize (Karveer, Rajasri) are to be sown on ridges and furrows till 20th August.

Marathwada: During the last two to three days there is no rainfall and the crops are under moderate stress. Only moisture conservation practices like mulching, intercultural and weeding are recommended to conserve the available moisture. Farmers are advising to go for protective irrigation in standing kharif crops to overcome soil moisture stress in some parts of the region.

Gujarat

For past four-five days occurrence of rainfall in Gujarat has changed drought situation most of the districts of Gujarat except Saurashtra & Kutch region. Saurashtra & Kutch is experiencing severe drought situation with scanty rainfall of -81%. The crop sown area has increased very much in Gujarat due to rainfall during the past four to five days. As on 16th August nearly 69% of the total cultivable area was covered under different crops.

- The rainfall in Gujarat region of the state has helped standing crops like pearl millet, sorghum, cluster bean, pulses, sesame, maize and cotton in all the districts.
- In Saurashtra & Kutch region, only around 50% of the area has been sown in different districts. Highest deficit rainfall is in Junagadh, Porbandar and Jamnagar. Most of the kharif crops other than Bt cotton have dried up. Farmers are able to provide life saving irrigation Bt cotton in most places from ground water.
- The area is under huge shortage of green fodder. If rainfall revives now, farmers are advised to sow fodder sorghum (Gundari, GFS-4 and GFS-5).
- Farmers are advised not to sow groundnut or cotton in this area now.

Punjab

In Punjab rainfall during the season so far is deficit by 63% as on 16th August. Widespread rainfall received in many parts central Punjab has brought down the rainfall deficit during the season from -68% on 12th August to -63% on 16th August.

- Under rainfed conditions, sowing of fodder, pearl millet varieties (PHBF-1, PCB-164 and FBC-16) can be taken up to August end.
- Under irrigated conditions, maize variety J-1006 can be sown up to middle of September.
- To save irrigation water in standing rice and basmati rice crops, irrigation can be advised two days after complete evaporation of ponded water.
- In cotton crop, spraying of potassium nitrate (2%) at weekly interval for four weeks starting from flower initiation stage to cope with the stress conditions.
- In widely spaced crops apply straw mulch @ 5 to 6 tons per ha to save water.

Haryana

The state has a deficit of -66% as on 16th August.

- Skip furrow irrigation for irrigated crops to save water.
- In pearl millet spraying of 2% urea to relieve stress and in light soils harvest every third row and use it as a fodder.

Other States

The rainfall situation in other states is comparatively normal. However, some districts recorded deficit rainfall and for those districts 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. For general farm operations to be taken up during this period, the regular agro-advisories issued by all the Agricultural Universities in their websites and other channels may be followed.

Availability of quality seed

For information on this please refer Bulletin No.10 issued by CRIDA on August 10, 2012.