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

During the last three days good rainfall has occurred in entire Rajasthan, Karnataka, parts of Punjab, North Gujarat and Kerala. Though scattered rainfall is occurred in Haryana, Punjab and Saurashtra and Kutch continued to remain under severe deficit conditions. Scattered rains in Karnataka and Maharashtra have also improved the crop situation and sowing progress. The major feature of the weather in the last three days is the significant improvement in Western Rajasthan and North Gujarat which are the major pulse belts. The rainfall in East Rajasthan in districts like Banaswada and Chhittorgarh is so high in the last three days, it has caused floods inundating the standing crops. Under this situation, the contingency plan for deficit/excess regions is provided below:

Rajasthan

In the entire State received moderate to heavy rainfall in the last few days which helped in revival of crops in the eastern part and giving opportunity for sowing of rainfed crops, particularly pulses in the Western Rajasthan.

- 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 Western Rajasthan, farmers can now take up sowing of short duration varieties of bajra (HHB-67) and moth bean (RMO 40 and 225) and fodder bajra in view of the adequate rains received.

Karnataka

From 1st June to 12th August 2012, state as a whole received 403 mm rainfall against the normal of 563 mm with a deficit of -29%. However, continuous but scattered rains in the entire Karnataka have improved the situation in the last few days.

- 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.
- In view of the recent rainfall farmers can sow fodder maize, cowpea and horsegram can be sown in light soils mostly for fodder purpose to cope with the shortage of green fodder in the region.
- Interculture, mulching and weeding in standing crops to conserve moisture
- Making of compartmental bunds in vertisols which are currently under fallow, so that adequate moisture is conserved for the rabi crops.

In South Interior Karnataka, continuous scattered rains are occurring in most parts and as on 6th August 64% of the normal crop area has been sown.

- In unsown areas, sowing of short duration finger millet varieties (Indaf-5, Indaf-9, GPU-28 ad GPU-48).
- Maize (Deccan 103) and fodder maize (South African) and sunflower (Morden, BSH-1) are recommended in all the traditional groundnut growing areas till 15th 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 620 mm of rainfall from 1st June to 13th August which is 84% of the normal rainfall. As on 6th August sowing was completed in 124.88 lakh ha amounting to 94% of the normal crop area. With good rainfall in the last week in the entire state, the sowing operations have been completed in most of the districts.

Vidharbha: Timely rainfall and adequate follow-up rains in this region do not warrant any contingency plan.

Madhya Maharashtra: This region has received good rainfall in the last three days. The following recommendations are made in different crops/regions:

- 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.

- 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.
- In Kolhapur region in medium deep black soils sowing of fodder maize (African tall, Panchganga, Gangasafed-2, Vijay, Local) are recommend.
- 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.

Marathwada: In this region, the initial rainfall was quite good and sowing operations have been completed in most districts. However, during last week there was no rainfall and the crops are under mild to moderate stress. Only moisture conservation practices like mulching, interculture and weeding are recommended to conserve the available moisture.

Gujarat

In Gujarat region, good rainfall has received in the last two days in North Gujarat, except Kutch.

- The rainfall has helped crops like pearlmillet, sorghum, clusterbean, pulses, sesame, maize and cotton in all the districts.
- In Kutch district, however, no rainfall has been received and farmers are not been able to sow any crop.
- Once rainfall revives, castor, clusterbean and fodder sorghum can be sown in unsown areas of North Gujarat and Kutch.
- The tobacco growing farmers of middle Gujarat region are advised to start transplanting of tobacco (GTH-1, A-119, GT-5, 7 and 9) immediately.
- In Saurashtra and Kutch the rainfall situation is not satisfactory. The area sown under different crops varies between 40-60%. 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), maize (African tall).
- Other crops like castor (GCH-4 and GCH-7) or Til (Purva-1) or Ajwan (Guj, Ajwan-1 & Guj. Ajwan-2) can be sown as soon as rainfall revives.
- Farmers are advised not to sow groundnut or cotton in this area now.

Madhya Pradesh

In Western Madhya Pradesh, the soybean crop is subjected to water logging due to excess rainfall in some districts of Malwa region. Farmers who did not adopt ridge furrow method of planting are advised to immediately provide field drainage to drain-out the excess water.

Haryana

Due to widespread rainfall in last couple of days, rainfall deficiency of the state reduced slightly (-65% from -67%) three days back.

- With the recent rainfall sowing of pearl millet (HHB-67, HHB-216 and 226) may be completed immediately.
- Sowing of moong bean (Satya, Asha and Muskan) may be completed with 20% higher seed rate.
- In the standing cotton crop, farmers are advised to do intercultural operations, skip furrow irrigation followed by straw mulching for conserving soil moisture.
- In standing crop of bajra apply N through foliar application and harvest every third row for green fodder in deficit areas.

Punjab

In Punjab rainfall during the season so far is deficit by 68% as on 12th 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.

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.