# Central Research Institute for Dryland Agriculture Santoshnagar, Hyderabad

# Contingency Plans and Alternative Cropping Pattern for the Drought affected States

This is only a summary of the Plans. Detailed zone-wise plans are given by the respective Agricultural Universities weekly.

#### **Rainfall situation**

The overall rainfall situation in the Country has improved substantially across sub-divisions. The country as a whole so far received normal rainfall (2%). However, the sub-divisions of Assam-Meghalaya, Gangetic West Bengal, Jharkhand, Bihar plains, and East Uttar Pradesh have been showing a deficit rainfall ranging from 26-48%.

# Outlook (up to 15<sup>th</sup> September 2010)

Fairly widespread rainfall activity would occur over Gangetic plains, Sub-Himalayan West Bengal & Sikkim, northeastern states, Orissa and westcoast. Fairly widespread rain/thundershowers would occur over Western Himalayan region and adjoining plains of northwest India

#### Jharkhand

As on 09.09.2010, Jharkhand is continuing with a deficit of 48% rainfall which is an alarming situation.

- Farmers are advised for broadcasting of urea after weeding in all standing crops which are not facing water stress in areas receiving good rainfall.
- Farmers are advised for sowing of short duration crops like: Niger (var. Birsa Niger 1 & 2) and Kulthi (var. Madhu, Birsa Kulthi 1) as soon as rains occur on typical uplands which are still fallow.

- Early sowing of Toria (var. P.T. 303, Panchali & Bhawani ) and Potato (var. Kufri Chandramukhi, Kufri Asoka & Kufri Kanchan) has also been adviced on uplands using normal sowing practice
- In low lands, there is no alternative to paddy. Hence, farmers are advised to
  continue with transplanting of nurseries with a specific advise of increasing
  number of seedlings (5-6 per hill) and additional fertilizer dose of 10% over
  recommended levels.
- Forage crops like maize (African Tall, J 1006) lobia (UPC4200) Moteh (Vidhan
   1) are also recommended for uplands and medium lands.
- Early sowing of vegetable Pea (var. Arkel, Azad Pea − 1) as a sole crop on upland and medium lands using normal package of practice.

#### Bihar

In Bihar, though there is a some rainfall in the last two weeks, still some districts are under drought and the deficit rainfall continues to be 26%.

- Do not take up direct sowing of rice in the present situation. With rainfall that occurred recently, farmers are advised to take up transplantation of short duration varieties of rice like Turante, Prabhat, Richhariya.
- Farmers are advised to take up sowing of pigeonpea (var. September arhar), blackgram (T9, Naveen Pant Urd 30, Urd 19) followed by late rabi crops.
- In fallow lands, in September winter maize (Shaktiman 1, 2, 3 & 4, Lakshmi, Rajendra hybrid 1, 2) is recommended.
- In case of good rains up to September 15, Toria (RAU TS17, Taramira, PT303, PT507, Panchali) should be sown as a catch crop. If Toria seeds are not available, Agarni variety of mustard can be grown as replacement.
- In case of rains by late September, lentil is recommended as a rabi crop.

# **Gangetic West Bengal**

Gangetic West Bengal is still reeling under drought situation with a deficit of 35% rainfall.

- In fallow areas, vegetables (cabbage, cauliflower, potato) and mustard may be sown/transplanted in the last week of September as early rabi crops.
- To compensate for losses in kharif rice production, farmers are advised to prepare for cultivation of Boro rice. The recommended varieties are IR64, IR36, Krishna

Hamsa, Khitish, Gotra-1, PHB 71, KRH 2, CNRH 3, JKRH 401, DRRH 2. Adoption of best management practices results in good yields. Start the nursery during first week of December. In case of low temperatures, during early January, protect the crop using plastic covers. The main crop also needs to be protected from low temperatures during January by irrigation.

### **East Uttar Pradesh**

In eastern U.P. with 28% deficit in rainfall, drought like situation is prevailing in some districts.

- Sowing of early potato Kufri Chandramukhi and Kufri Bahar are recommended for highly deficit / scanty rainfall areas.
- Sowing Toria Type-9, Type-36, Narendra Toria-1 and PT-30 may be done in fallow lands
- Early varieties of vegetables Pea Azad, Pea-3, AzadPea-1 and Arkel may be sown.
- Fodder cowpea and fodder peralmillet, toria and niger may be taken up till September.
- In areas where Khaira disease is noted in rice spraying of 5 kg ZnSO4 with 20 Kg urea in 800 lt. of water/ha is recommended.