National Workshop on

Innovations and Better Management Practices for Climate Resilient and Sustainable Cotton Production

15-16 December, 2010



Central Research Institute for Dryland Agriculture Santoshnagar, Hyderabad 500 059

Background

The Cotton crop in India supports 60 million people directly and indirectly through the processes of production, processing, marketing and trade. Majority of the cotton producers (5.6 million, 88% of all cotton growers) are small holders with an average holding size of 1.5 ha. The cash crop is cultivated intensively in both irrigated and rainfed situations across several States in India and in general farmers are passionate about its cultivation and readily adopt new technologies related to seed, fertilizers or new pesticide molecules. In the process resources are injudiciously used unmindful of the economic risk at the individual level and ecological consequences at the agroecosystem level. Cotton, be it Bt-cotton now or conventional cotton then, is always beset with environmental concerns due to the management practices followed by farmers. Among the production related concerns are: loss of diversity due to widespread monoculture in some regions which earlier supported diverse crops and their cultivars; inappropriate irrigation management practices in canal command areas and over-exploitation of groundwater and mismanagement of surface water in rainfed areas resulting in lower water productivity in both irrigated and rainfed areas; ecological imbalances due to high nitrogenous inorganic fertilizer use and hazardous pesticide use; a negative carbon footprint due to excessive tillage, input use and burning of crop residues all associated with long-term adverse impacts on the quality and sustainable use of natural resources, animal and human health.

Why this Workshop

Cotton production and productivity in the country is largely influenced by the monsoon behavior: total quantity and distribution of rainfall. The increasing frequency of climatic variability being witnessed each season is largely influencing the fortunes of cotton cultivators. A case in point is the dip in productivity levels in Andhra Pradesh during 2009 because of unprecedented delay in monsoon onset. Cotton cultivars in India are now predominantly hybrids (90% area) and 94% of this is occupied by Bt-cotton hybrids in 2009. Seed is a strategic resource and it is important to identify cultivars that have resilience to abiotic and associated biotic stresses that crop up with increasing frequency. The same holds good for revisiting production practices and input use and flag innovations.

The workshop is not a debate on Bt- vs Non-Bt cotton. It is neither a debate on conventional versus organic production. The workshop will focus on identification of production and management practices that ensure sustainable production of cotton in various agro-ecological regions in India having attributes that qualify them to be termed 'better' in terms of their environmental friendliness, adaptation to climatic variability, sustainable use of natural resources and economic benefits accruing to the farmers. The goal is to prepare a vision document for promotion of these practices for implementation purpose with suitable policy interventions across regions after wide consultation with farmer groups and line departments.

Objectives

- Exchange of knowledge on innovations in production practices in cotton in different agro-ecological regions of the country
- To define and document 'Better Management Practices' (BMPs) in the context of sustainability, climate change mitigation and resilience
- To prepare a vision document for 'BMPs in Cotton' for gaining acceptance among stakeholders: Scientific, Agro-industry and Public-Private Partnerships for wider outreach

Workshop format

A. Thematic Sessions:

Day 1 – December 15, 2010 (Tuesday)

Session 1: Inaugural: Introduction to Better Management Practices

Session 2: Soil Fertility Management and Production Practices

Session 3: Pest Management Practices Session 4: Water Management Practices

Day 2 - December 16, 2010 (Wednesday)

Session 5: Towards Climate Change Adaptation and Mitigation

Session 6: Conclusions

In each session, a key speaker will introduce the theme, present an overview on basket of options in 30 minutes and may moderate the session which will have 4-5 invited oral presentations (10 minutes each) by participants from different agroecological regions of the country. This will be followed by a discussion on innovative and sustainable practices. Towards the end of the session, the moderator/key speaker will summarize the identified BMPs for documenting the proceedings.

B. Call for Papers

Invited key paper will be of 5000 words length including figures, tables and references. Session oral papers will be of 1000 words length. Soft copy of the write-up in Times New Roman 12 font with 1.5 line spacing may be sent by email to organizing secretary before **20th November 2010** in the suggested format i.e., 1) Session theme 2) Title, Authors, Affiliation 3) Abstract 4) Introduction 5) Methodology 6) Results and Discussion 7) Recommendation Domain (agro-ecological setting) and Impact of the innovation/Practices 8) Conclusions and 9) References. The papers will be compiled for distribution during the workshop for reference. If needed the papers will be revised by the authors and edited as part of the proceedings of the workshop to be brought out in the form of a quality publication.

Session oral papers are open and will be selected by a panel of experts and communicated to the authors by 30th November. Some interesting papers will be selected for poster session. There would be no registration fee charged for participation in the workshop. However, travel and accommodation charges will have to be borne by the participants selected for poster presentation.

Travel and Accommodation

Travel costs will be met by the Sponsors for invited key speakers. Accommodation will be provided for participants at the guest house located at Santoshnagar within the CRIDA campus. The workshop will start at 10 AM on the first day and end by afternoon (4 PM) on the second day. Onward and return journeys may be planned accordingly.

Organizing Committee

President:

Dr B. Venkateswarlu, Director

Central Research Institute for Dryland Agriculture (CRIDA)

Santoshnagar, Hyderabad 500 059

Phone: 040-24530177; Fax: 040-2431802

E-mail: vbandi 1953@yahoo.com

Organizing Secretaries:

Dr Y.G. Prasad, Principal Scientist (Entomology)

Mobile: +91 9490192749; E-mail: ygprasad@gmail.com

Dr K.V. Rao, Senior Scientist (SWCE)

E-mail: mlkv33@yahoo.co.in

Dr M. Prabhakar, Senior Scientist (Entomology)

E-mail: prab249@gmail.com

Dr G. R. Rao, Principal Scientist (Forestry)

grrao@crida.ernet.in



Sponsor: World-Wide Fund for Nature-India, New Delhi

WWF-India Contacts:

Murli Dhar, Programme Coordinator, WWF-India, New Delhi, mdhar@wwfindia.net

P. Vamshi Krishna, WWF-India, Warangal

Mobile: +91 9849565496; E-mail: pkrishna@wwfindia.net