Business Session II Cotton Production and Productivity in India

Chair: Mr. Dhiren Sheth, President, Cotton Association of India

Panelists:

Dr. K. R. Kranthi, Director, CICR Mr. Chaminda Rajapakse, Lead, 2030 Water Resources Group Mr. Rakesh Dubey, General Manager – Policy and Industry Affairs, Monsanto India Region Mr. Unupom Kausik, Deputy CEO, National Collateral Management Services Ltd. Mr. S.U. Baig, Director (Tech.) Nath Bio-Genes (I) Ltd. Mr. Mohit D. Shah, Gill & Company

"Down With Hybrids"

Dr. Kranthi noted that the introduction of biotechnology, a doubling of fertilizer use, the application of seed treatments to planting seed, and the use of insecticides against sucking pests, had led to the increase in cotton yields between 2002 and 2006. However, yields have stagnated in the years since. Biotechnology has very effectively controlled the pink bollworm, but the American bollworm and whitefly may still cause significant damage. He said that to raise yields further, India must return to planting straight varieties (non-hybrid varieties or open-polinated varieties). Mr. Kranthi called on government to ensure that farmers have access to all technologies, including biotech genes and pesticides, and he warned that India must enforce the implementation of insect resistance strategies. He noted that India has the longest cotton growing season in the world, more than 200 days, resulting in increased insect exposure.The long growing season derives from the use of hybrids, and he called on government to allow the registration of open-pollinated varieties. Dr. Karanthi proclaimed, "Down with Hybrids."

Mr. Kausik urged researchers to develop new uses for cotton seed and biomass to enhance farm incomes, and to focus on cotton as a food crop.

Mr. Dubey agreed with Dr. Kranthi that biotechnology has transformed the cotton sector of India. He agreed with Mr. Kausik that cotton seed and oil can be used as food products. He urged increased use of irrigation and mechanization. Bollguard technology has been effective in India, but the emergence of resistance must be managed through implementation of Insect Resistance management and mandatory refuge requirements. He noted there are an array of available technologies that can contribute to increased yields in India, including herbicide tolerant biotech traits.

Mr. Rajapakse observed that cotton is an arid-area crop but that the water need of cotton increases at peak bloom. Since cotton is a resilient crop under arid conditions, cotton may be helpful to farmers in areas affected by drought as a result of climate change. Mr. Rajapakse addressed challenges to expanded irrigation in India. He asked whether the private sector can be harnessed to expand irrigation availability or to increase use of water-conserving technologies. He noted that government must provide an enabling environment for private sector involvement in yield enhancing inputs and infrastructure.

Mr. Baig noted that more than 90% of Indian cotton area is planted to hybrid varieties. He said that cotton breeding and biotechnology are needed to overcome yield constraints. He called on government funding for the development of open-pollinated cotton varieties to provide resistance to sucking pests. He called on government to facilitate the collection of germplasm from around the world to improve Indian varieties.

Mr. Shah observed that the cotton situation in India has made great strides in the last ten years and India is now the largest producer in the world. He acknowledged that India has challenges, including white fly in North India, insect infestation in Central India, and poor monsoon patterns in recent years. Mr. Gill said that additional technological breakthroughs will lead to further progress in the decade ahead. He called on industry and government to provide better statistics on production and arrivals so as to improve marketing performance through better decision making. He urged better education of farmers to facilitate adoption of technologies already available, and he called on government to increase funding for research to provide the new technologies needed for tomorrow.

All speakers endorsed the use of cotton seed oil and meal as food ingredients.