

Crop sector case studies: Summary report of the ABDC-10 parallel session¹

There were 100+ participants and two case studies on biotechnology adoption in developing country crops were presented by panelists:

1. Rhizobium-based biofertiliser for common bean in Mexico (H. Peralta)
2. New Rice for Africa, NERICA (S. Sanyong)

Additional cases of biotechnologies, already largely adopted were then presented by participants from the floor and included:

- Mutation breeding – cassava in Ghana, rice in Vietnam
- Micropropagation in sugar cane in India, banana in Ghana & Malaysia
- Marker-assisted selection (MAS) in pearl millet in India, rice and water melon in Malaysia
- Biofertilizers and entomopathogens in Cuba
- *Bacillus thuringiensis* (Bt) pesticide sprays by local groups in India

A general discussion then focused on the following key issues:

1. Factors that promoted the adoption of biotechnologies
 - Technologies that are of low cost, easy to use, and with a long shelf life
 - Contribution to improved crop and soil management
 - Local provenance and/or ownership of technologies
 - Ready access by R&D to government agencies and facilitation of regulatory issues
 - Demonstrable improvement in socio-economic prospects of farming families
2. Factors that inhibited the adoption of such biotechnologies
 - Mindsets of large numbers of often diverse farmers
 - Burden of government regulation, especially for genetically modified crops
 - Inadequate extension systems
 - Cost of technologies
 - Technologies that do not match farmer needs
 - Difficulties when technologies require changes in agronomic practices
3. Additional issues raised by participants
 - Existing “low tech” options can sometimes be overlooked
 - Programmes should be needs-driven rather than technology-led
 - It is not always appropriate to focus on “high tech” options
 - A greater role for public-public partnerships in developing countries and north-south partnerships needs to be explored
 - In many cases there will be important roles for public-private partnerships, especially in the latter stages of technology roll-out

¹ This is the summary report of the roundtable organized by FAO on crop sector case studies on the first day of the FAO international technical conference on Agricultural Biotechnologies in Developing Countries (ABDC-10) that took place in Guadalajara, Mexico on 1-4 March 2010 (<http://www.fao.org/biotech/abdc/parallel/en/>).