

## In 2010

- Mexico planted 58,000 hectares of biotech cotton, and 13,000 hectares of biotech RR<sup>®</sup> soybean for a country total of 71,000 hectares of biotech crops,



compared to 73,000 hectares in 2009.

- In 2009/10, the first biotech maize trials in the country were planted after an 11 year moratorium. There were 20 experimental field trials of GM maize conducted in the northern states of Mexico in Sonora, Sinaloa, Tamaulipas, Chihuahua and La Laguna.
- All the trials were conducted by independent scientists from recognized local Universities and Public Research Institutions to determine the agronomic equivalence of biotech maize versus its conventional counterpart; the biological effectiveness of insect resistant maize and the impact on non-targeted organisms; and the biological effectiveness of herbicide tolerant maize.

## Biotech Cotton Adoption

- Mexico is the last of the six “founder biotech crop countries” having grown biotech Bt cotton in 1996, the first year of the global commercialization of biotech crops.
- In 2010, the total cotton plantings in Mexico were approximately 80,000 hectares. Approximately 73% or 58,000 hectares were biotech. A high percentage (93%) was planted with the stacked trait of Bt/HT with the marginal balance as Bt or HT.
- RR<sup>®</sup>soybean was planted in 13,000 hectares in 2010 compared with 17,000 hectares in 2009.



## Regulation on Biotech Crops

- Mexico is the center of diversity for maize and the conservation of biodiversity in Mexican landraces has fuelled a long standing debate vis-à-vis the potential for gene flow from biotech maize imported from the USA.
- Following years of debate, the Mexican Congress and Senate approved a Biosafety Law on 15 February 2005 and its By-Laws by 2008 that facilitated the introduction of biotech crops.

Population: **107.8 million**  
 GDP: **US\$1,088 billion**  
 GDP per Capita: **US\$10,230**  
 Agriculture as % GDP: **4%**  
 Agricultural GDP: **US\$43.5 billion**  
 % employed in agriculture: **14%**  
 Arable Land (AL): **25.6 million hectares**  
 Ratio of AL/Population\*: **1.0**

Major crops:

- Maize
- Soybeans
- Cotton
- Wheat
- Rice
- Coffee

Commercialized Biotech Crops:

- Bt Cotton
- HT Soybean

Total area under biotech crops and (%) increase in 2010:

**71,000 Hectares (-2.7%)**

Farm income gain from biotech, 1996-2009: **US\$102 million**

\*Ratio: % global arable land / % global population

- With new law, authorization for the sale, planting and utilization of biotech crops and products is on a case-by-case basis, under the control of Comision Intersecretarial de Bioseguridad y Organismos Geneticamente Modificados (CIBIOGEM), an inter-ministerial body.
- The Mexican regulatory framework for GM maize was concluded in March 2009, which was accompanied by the enactment of the Special Protection Regime for Maize – which provides for the protection of the Mexican maize landraces.

## Benefits from Biotech Crops in Mexico

- Mexico grows just over 7 million hectares of maize annually and is estimated to have enhanced farm income from biotech cotton and soybean by US\$102 million in the period 1996 to 2009 and the benefits for 2009 alone is US\$11 million (Brookes and Barfoot, 2011).

## Future Prospects of Biotech Crops in Mexico

- Further trials, planned for 2011 will evaluate biotech maize semi-commercially; these trials will generate valuable information regarding the use of adequate biosafety measures that will allow coexistence of biotech and conventional maize to be practiced on a realistic and pragmatic basis, as well as to provide accurate cost-benefit data regarding economic benefits for farmers.
- The first permits for biotech maize trials to be conducted semi-commercially in 2011 were requested in the last quarter of 2010, for planting in 2011.



### Excerpts from:

James, Clive. 2010. Global Status of Commercialized Biotech/ GM Crops: 2010. *ISAAA Brief* No. 42. ISAAA: Ithaca, New York.

### Other Sources:

The World Bank. <http://www.worldbank.org/>  
 Food and Agriculture Organization of the United Nations.  
<http://www.fao.org/countryprofiles/>

### For more information, contact:

ISAAA SEAsiaCenter  
 c/o IRRI, DAPO Box 7777  
 Metro Manila, Philippines  
 Phone: +63 2 845 0563  
 Telefax: +63 49 5367933  
 Email: [knowledge.center@isaaa.org](mailto:knowledge.center@isaaa.org)

Or visit: <http://www.isaaa.org/>