

## In 2010

- In 2010, out of a total of 400,000 hectares planted to cotton, 260,000 hectares or 65%, (two-thirds), were planted to Bt cotton.
- In the second year running, the country had the highest proportional increase in biotech hectareage in the world of 126% –115,000 hectares in 2009 increased to 260,000 hectares in 2010.
- There are around 80,000 Bt cotton farmers in 2010, majority (80%) of whom are very small resource poor-farmers with less than 3 hectares of land



cotton hectares in 2008 to a substantial 29% of 400,000 hectares in 2009 and a record 65% adoption or 260,000 hectares in 2010.

- There were approximately a total of 125,000 cotton farmers in Burkina Faso in 2010, of which 80,000 were Bt cotton farmers and categorized further into 4,000 manual farmers (with no draught animals), 65,000 small farmers, and 13,000 larger farmers.
- The main cotton growing areas in Burkina Faso are: (1) N'dorola, Kenedogou, (2) Banfora, Comoe, (3) Bobo-Dioulasso, Houet, (4) Diebougou, Bougouriba, (5) Hounde, Tuy, (6) Dedougou, Mouhoun, (7) Koudougou, Boulkiemde.
- The three cotton producing companies in Burkina Faso, SOFITEX, FASO COTTON and SOCOMA, together with the INERA Cotton Program were collectively responsible for the first year of Bt cotton seed production in the country.

## Biotech Cotton Adoption

- Burkina Faso started to plant Bt cotton in 2008 with approximately 8,500 hectares, in 115,000 hectares in 2009, and 260,000 hectares in 2010.
- The adoption rate of Bt cotton in Burkina Faso has increased from 2% of 475,000

## Benefits from Bt cotton

A well-conducted survey in 2009 (Vitale et al. 2010), has provided a detailed analysis of the impact of Bollgard®II in Burkina Faso, and is summarized below:

- The yield advantage of Bollgard®II over conventional was 18.9%.

Population: **15.8 million**  
 GDP: **US\$8.1 billion**  
 GDP per Capita: **US\$510**  
 Agriculture as % GDP: **50.3%**  
 Agricultural GDP: **US\$13.3 billion**  
 % employed in agriculture: **70%**  
 Arable Land (AL): **10.6 million hectares**  
 Ratio of AL/Population\*: **0.7**

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

Major crops:

- Cotton
- Maize
- Shea Nuts
- Millet
- Sorghum
- Peanuts
- Rice

Commercialized Biotech Crop: **Bt Maize**

Total area under biotech crops and percent increase in 2010:  
**270,000 Hectares (+126%)**

- Yield increase plus labor and insecticide savings (2 rather than 6 sprays) resulted in a gain of US\$65.57 per hectare compared with conventional cotton; this translated to a 206% increase in cotton income.
- For the average cotton farm with 3.16 hectares of cotton, Bollgard®II increased farm income by US\$207.20; INRA surveys indicated that the average cotton farm income of US\$657.11 increased by 31% with the use of Bollgard®II.
- The main benefit of Bollgard®II derives from the increase in yield whereas the reduction of production costs associated with four less insecticide sprays is offset by the higher cost of the seed.
- National benefits to farmers in 2009 were estimated at US\$35 million representing 53% of total benefits with the balance accruing to the developers of the technology.
- Extrapolating for 2010 when the adoption rate was 65%, compared with 29% in 2009 the national benefit from Bt cotton in 2010 maybe of the order of up to US\$80 million.



**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/>

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