

In 2010

- RR[®]soybean was grown on 850,000 (~0.9) hectares in Bolivia, equivalent to 85% of the total national hectareage of soybean estimated at almost 1 million hectares.



Biotech Crop Adoption in Bolivia

- In 2008, Bolivia became the tenth country to officially grow RR[®]soybean with 600,000 hectares in 2008, equivalent to 63% of the total national hectareage of 960,000 hectares.
- Bolivia is a major exporter of soybeans (approximately 5% of total exports) in the form of beans, oil, and cake
- The presence of an effective and efficient certified seed industry in Bolivia greatly facilitates access and adoption of certified RR[®]soybean seed which is used not only by the larger farmers but increasingly by smaller subsistence farmers.
- Bolivia ranks eighth in the world in 2009, with 979,678 hectares, after the USA (30.9 million hectares), Brazil (21.8), Argentina (16.8), India (9.6), China (8.8), Paraguay (2.6), and Canada (1.4). Of the top eight soybean countries, five (USA, Argentina, Brazil, Paraguay and Canada) grow RR[®]soybean.
- RR[®]soybean has been adopted on extensive hectarages in Bolivia's two neighboring countries of Brazil (over 17 million hectares) and Paraguay (over 2 million hectares) for many years.

Benefits from RR[®]soybean in Bolivia

- RR[®]soybeans continue to expand because cost-benefit analysis favors RR[®]soybean over conventional. Partial budget analysis in 2008 indicates that the net benefits favor RR[®]soybean over conventional, which is approximately US\$200 (US\$196) per hectare.
- The principal benefits, include a 30% increase in yield, a 22% savings on herbicides and more modest savings in labor and other variable costs; in some cases, cost of RR[®] seed was lower than conventional seed.
- Based on a net return of US\$196 per hectare with 850,000 hectares of RR[®]soybeans, the 2010 benefits at the national level were of the order of approximately US\$165 million, which is a significant benefit for a small poor country such as Bolivia.

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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Population: **10.1 million**
GDP: **US\$17.4 billion**
GDP per Capita: **US\$1,630**
Agriculture as % GDP: **14%**
Agricultural GDP: **US\$2.4 billion**
% employed in agriculture: **43%**
Arable Land (AL): **3.6 million hectares**
Ratio of AL/Population*: **2.0**

*Ratio: % global arable land / % global population

Major crops:

- Soybean
- Maize
- Coffee
- Cocoa
- Sugarcane
- Cotton
- Potato

Commercialized Biotech Crops:

- HT Soybean

Total area under biotech crops and (%) increase in 2010:
850,000 Hectares (+12%)

Farm income gain from biotech, 2008-2010: **US\$165 million**