

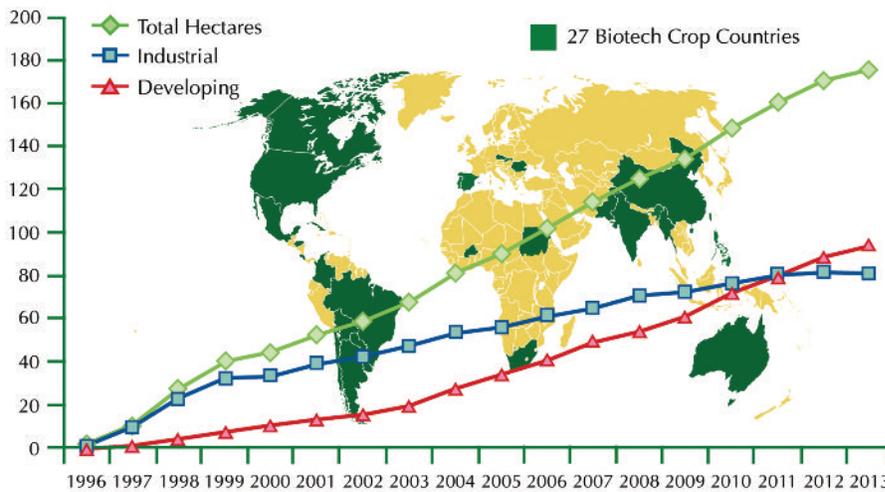


Global Adoption of Plant Biotechnology

Plant biotechnology has been adopted at a higher rate than any other agricultural practice in history. In 2013, biotech crop varieties were grown by 18 million farmers on 170 million hectares in 27 countries, including 19 in the developing world. This represents a 100-fold increase in hectareage since 1996, and 16 times the area of Korea. This remarkably high adoption rate applies to both large and smallholder farmers. In fact, developing countries represent the largest growth segment of biotech crop plantings, adopting the technology twice as fast as industrialized countries in recent years.

At the same time, Korea has developed into one of the world's foremost technology superpowers. It has long used bioengineered materials in manufacturing cosmetics and medical products. And although it has yet to commercialize plant biotechnology in its own country, it is busy with research and development efforts that could, one day, provide significant engines of economic growth when exported abroad. Active research is being carried out to develop new varieties of environmental stress and pest resistant rice, viral tolerant red peppers, and a number of other crops, which it hopes to market to the increasing number of farmers around the world who have embraced plant biotechnology.

Global Area of Biotech Crops Million Hectares (1996-2013)



A record 18 million farmers, in 27 countries, planted 175.2 million hectares (433 million acres) in 2013, a sustained increase of 3% or 5 million hectares (12 million acres) over 2012

Source:
Clive James, 2013

» FAST FACTS

Worldwide:

- From 1996 to 2013, farmers in 29 countries worldwide planted more than 1.25 billion hectares of biotech crops.ⁱ
- Of the 18 million farmers growing biotech crops in 2013, 16 million were smallholder farmers in developing countries.ⁱ
- More than 90 percent of farmers repurchase biotech seed year-after-year due to successful results.ⁱⁱ

Korea:

- In 2013, there was biotechnology R&D being carried out on 58 varieties of 13 crops, including rice, soybeans, cabbage, and red peppers.ⁱⁱⁱ
- Most development focuses on rice and its environmental resilience, pest resistance, and herbicide tolerance.

ⁱ James, Clive. 2013. Global Status of Commercialized Biotech/GM Crops: 2013. ISAAA Brief. No 46. ISAAA: Ithaca, NY.

ⁱⁱ Biotechnology Industry Organization Fact Sheet. "Agricultural Biotechnology Delivering Benefits for Farmers, Consumers, and the Environment." http://getbiotechsmart.com/sites/getbiotechsmart.com/files/student/agricultural_biotechnology_delivering_benefits_for_farmers_consumers_and_the_environment.pdf

ⁱⁱⁱ Park, Soo-chul. 17 February 2014. Current Status on Domestic Development of GM Crops, The National Center for GM Crops, Rural Development Administration.

The Global Industry Coalition (GIC) receives input and direction from trade associations representing thousands of companies from all over the world. Participants include associations representing and companies engaged in a variety of industrial sectors such as plant science, seeds, agricultural biotechnology, food production, animal agriculture, human and animal health care and the environment.