



FACT SHEETS

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What Is Being Grown, and Where**

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Status of Genetically Modified (GM) Crops: What Is Being Grown, and Where

In 2008, genetically modified (GM) crops were grown on a total of 125 million hectares of land in 25 different countries. Of these 25, 15 are developing nations.

The top eight GM-crop producing countries are the United States, Argentina, Brazil, India, Canada, China, Paraguay, and South Africa.

The primary GM crop produced worldwide is soybean, which accounted for 53 percent of global biotech area in 2008, followed by maize (30 percent), cotton (12 percent), and canola (5 percent).

Since 1996, when the first GM crops were commercially produced, herbicide tolerance has consistently been the dominant trait.

Three countries in Africa are commercially growing genetically modified crops. In 2008, Burkina Faso and Egypt started producing biotech cotton and maize, respectively. South Africa has been commercially producing GM crops (primarily maize, cotton, and soybean) for several years.

Six countries in Africa have grown or are growing GM crops in confined field trials, namely, Burkina Faso, Egypt, Kenya, South Africa, Tanzania, and Uganda, which is producing biotech banana and cotton.

In 2007, black sigatoka-resistant banana became the first GM crop planted in Uganda in a confined field trial by the National Agricultural Research Organization (NARO). Starch bananas are Uganda's main staple crop.

Cotton is Uganda's third largest export crop, despite low productivity rates. Insect resistant and herbicide tolerant GM cotton varieties could improve productivity. India, which grows GM cotton for commercial purposes, is the leading cotton producer in the world.

In 2008, 5 million smallholder Indian farmers benefited from planting 7.6 million hectares of Bt (insect resistant) cotton. Conservative estimates indicate that, on average, yields increased by more than 30 percent, insecticide application decreased by nearly 40 percent, and profitability increased by 88 percent.

In 2008, 13.3 million farmers worldwide grew GM crops. Of these, 12.3 million, or 90 percent, were smallholder, resource-poor farmers in developing countries.

Source: C. James. 2008. Brief 39, Global Status of Commercialized Biotech/GM Crops: 2008, ISAAA.

Biotechnology and Biosafety

In February 2009, Kenya enacted its Biosafety Bill, joining Mali and Togo, which passed national biosafety laws in 2008. Kenya had been working on biosafety legislation for the responsible production and use of agricultural biotechnology, including GM crops, since 2002.

South Africa, which has been producing GM crops for more than 10 years, has a fully functioning biosafety system to safely market, export, and import both GM and non-GM crops.

Agriculture's Critical Role in Africa's Development

In most African countries, agriculture is the engine of economic growth, and agricultural growth is the cornerstone of poverty reduction. Approximately sixty-five percent of Africans rely on agriculture as their primary source of livelihood. Small-scale farmers are responsible for more than ninety percent of Africa's agricultural production.

Agriculture accounts for 30 to 40 percent of Africa's total gross domestic product (GDP), and almost 60 percent of its total export earnings.

By raising productivity, investments in agriculture contribute to growth and poverty reduction both directly and indirectly. Higher farm wages and lower food prices lead to powerful real income effects. The welfare benefits are large when spread across all consumers, even if some producers end up being worse off.

Agricultural growth rates in Africa have increased modestly from about 2.4 percent a year in 1980–89 to 2.7 percent in 1990–99 and 3.3 percent a year since 2000.

African governments have agreed to increase public investment in agriculture by a minimum of 10 per cent of their national budgets and to raise agricultural productivity by at least 6 per cent. Only a handful of countries in Sub-Saharan Africa—Ethiopia, Mali, Mozambique, Nigeria, Senegal, and The Gambia—have surpassed the threshold of six percent agricultural growth in recent years.

African governments spend much less on agriculture relative to other developing countries. In aggregate, African public spending on agriculture accounted for five to seven percent of the total national budget from 1980 to 2005. In Asia, the equivalent figure has been 6–15 percent.

Only a few African countries—Burkina Faso, Ethiopia, Malawi, and Mali—have surpassed the threshold of 10 percent of budgetary spending on agriculture in recent years. Nearly half of African countries reduced their spending on agriculture during the period 1980 to 2005.

Sources: S, Fan, et al. 2009. Policy Brief 12, Setting Priorities for Public Spending for Agricultural and Rural Development in Africa. IFPRI.

World Bank. 2008. The World Development Report, Agriculture for Development.