

Need GM? articles:

- [Introduction](#)
- [Drought resistance](#)
- [Flood resistance](#)
- [Pest resistance](#)
- [Salt tolerance](#)
- [Disease resistance](#)
- [Health promoting](#)
- [High yield](#)
- [Biocontrols and aflatoxin](#)
- [Tolerance to specific soil and weather conditions](#)
- [Industrial use](#)
- [Non-GM index](#)

GM promoters have jumped on the bandwagon of climate change, hyping GM crops as a means of helping humanity to survive climate change in articles like these:

["GM foods 'could feed growing population during climate change'"](#) (Louise Gray, The Telegraph, 22 Jan 2009)

["Fussy eaters – what's wrong with GM food?"](#) (Jonathan Jones, BBC News, 6 July 2010)

In fact, maintaining a broad gene pool of crop varieties suited to different climate conditions is the best way to ensure that we survive climate change. In addition, low-tech methods such as using cover crops, incorporating lots of organic matter into soil, managing water flow, and growing a wide variety of crops as insurance, are tried and tested ways of building resilience into farming systems.

Conventional plant breeding is effective in developing crops for different climate conditions. Here are a few examples.

Beans

[Heat, drought and disease tolerant beans released \(June 2010\)](#) And they yield and adapt well too!

[Non-GM beans developed for harsh Mediterranean conditions](#) (November 2007)

Cowpea

[Cowpeas bred for extra-early maturity, high protein and high yield potential with resistance to major diseases and aphids, as well as high levels of tolerance to heat and drought, for tropical and subtropical countries](#) (April 2013)

Maize/corn

[Drought-tolerant maize wins 2012 UK Climate Week Award](#) (March 2012)

[Dow launches drought-resistant corn](#) (January 2011)

[Syngenta launches drought-resistant corn](#) (December 2010)

[New maize could prepare farmers for climate change](#) (September 2010)

New varieties of drought-tolerant maize could deliver a US\$1.5 billion gain in food and income in Sub-Saharan Africa as well as helping smallholders cope with the effects of climate change, according to a study carried out in 13 countries in the region.

Link to full paper: [Potential impact of investments in drought tolerant maize in Africa](#)

[Non-GM corn offers solution to modern climate challenges](#) (April 2009)

One solution to the challenges of feeding the world may come not from the labs of genetic engineers, but from the timeless wisdom of Native Americans and a dedicated corn breeder from Montana.

[New maize could prepare farmers for climate change](#) (September 2010)

New varieties of drought-tolerant maize could deliver a US\$1.5 billion gain in food and income in Sub-Saharan Africa as well as helping smallholders cope with the effects of climate change, according to a study carried out in 13 countries in the region.

Pearl millet, sorghum, chickpea, pigeon pea and groundnut

[ICRISAT develops climate change-ready varieties](#) (June 2009)

When the world gets warmer with climate change, the dryland tracts will become even drier, making it more difficult for the farmers to grow crops in this region. The improved crops developed by the International Crops Research Institute for the Semi-Arid Tropics (Icrisat) and partners are able to withstand severe droughts, tolerate higher temperatures and mature early, enabling the farmers to be ready to meet the challenges of climate change. The new crops include pearl millet, sorghum, chickpea, pigeon pea and groundnut.

Potatoes

[Blight-resistant potatoes could lower carbon footprint from agricultural sector](#) (July 2010)

Rice

[Multi-trait super-ricebred to improve tolerance to salinity, flood, zinc deficiency, pests](#) and other problems (January 2011)

[African farmers develop new type of rice well-adapted to poor soils](#) (July 2009)

Rice farmers in West Africa have developed a new type of rice adapted to poor soils. This has come about through spontaneous cross-breeding in the field between African and Asian rice cultivars.

[Indigenous rice better than GM for dealing with stress](#) (October 2007)

A New Delhi-based NGO, together with farmers from nine Indian states, has developed a register documenting over 2,000 indigenous rice varieties. They say GM rice strains are not only costly to cultivate but also are a poor match to the native strains in fighting pests, diseases and environmental fluctuations.

Sorghum

[Climate-adapted, high-yield sorghum seeds developed by the Alliance for Green Revolution in Africa \(AGRA\) help farmers in Mali adapt to climate change](#) (February 2011)

Tomato

[Organic farmers in Nepal develop heat-tolerant, disease-resistant, high-yield tomato](#)
(December 2010)

A Nepali farm specializing in producing organic vegetables has developed nine varieties of tomatoes it says are high-yielding as well as tolerant to disease and heat. The tomatoes, named Srijana ("creation"), will be available in the markets of Kathmandu within a year.