



GM Mustard



GM FOOD CROPS IN INDIA

GM crop footprint in India is all set to grow once the govt gives its final nod to GM Mustard, a variety grown by a Delhi University institution. It would be a strong push for genetically modified variants of food crop, which have been fiercely opposed by farmer bodies, food experts and activists.

The Backstory

- India slowed down on GM trials after 2010 amid stiff opposition from farmers, activists
- NDA govt changed course on GM field testing. Eight BJP-ruled states have now approved field trials of GM crops, including transgenic rice, cotton, maize (corn), mustard, brinjal and chickpea
- In 2010, the then UPA govt had barred commercial planting of Bt Brinjal and given states the power to veto transgenic-crop field trials, effectively pausing such trials

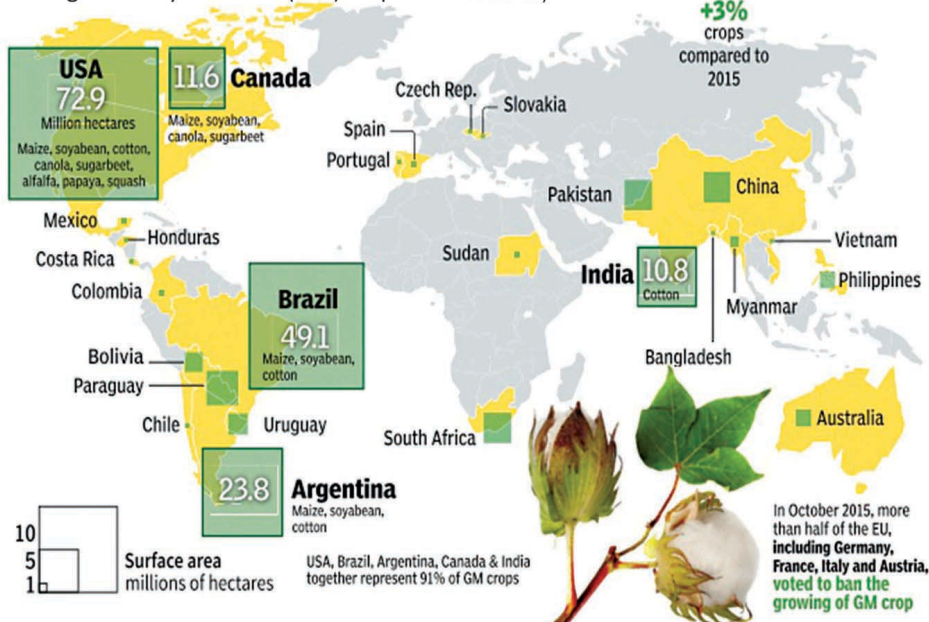
GM crops grown in 26 countries in 2016

India has the 5th largest area planted under genetically modified (GM) crops

Total global area under GM crops (in million hectares)

185.1 mh (2016)	179.7 mh (2015)	181.5 mh (2014)	175.2 mh (2013)
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+3% crops compared to 2015



India's BT Experience

BT Cotton

- Grown in India for over a decade – output's up four-fold since commercial cultivation began in 2002
- 95% of 11-12mh under the crop is BT cotton
- But BT cotton, supposed to be immune to pests, crumbled under a whitefly attack in Punjab in 2015
- Over 95% of damaged crop was BT cotton. Damage estimated at Rs 4,500 crore
- The crisis was blamed for over a dozen farmer suicides

BT Brinjal

- Though this was approved for cultivation by India's Genetic Engineering Approval Committee (GEAC) in Oct 2009, protests saw then environment minister Jairam Ramesh putting an indefinite ban on its cultivation in Feb 2010.
 - Brinjal farmers would be dependent on MNCs for seeds from the company that makes them, argued the anti-GM activists
- ### GM Mustard
- GEAC has recommended

cultivation of GM mustard, taking it closer to becoming India's first GM food crop

- Those opposing GM Mustard are against the genetic modification technology in agriculture over food safety issues
- Anti-GM activists say that claims that the variant, DMH11, has a 30% higher yield are false. There are several naturally grown mustard seed variants and there have been no issues of low productivity, they say
- Regular seeds can be reused, are cheap and widely available. GM seeds can't be reused and must be bought. They contain so-called 'terminator technology', meaning they've been genetically modified such that resulting crops do not produce viable seeds of their own
- When crops failed in the past, farmers could save seeds, replant the following year. Not possible with GM seeds