

GM Crops

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Why in news?

Concerns have been expressed with regards to cultivation and growth of BT brinjal which is a genetically modified crop.

What are genetically modified crops?

- A GM plant is a plant that has a new genetically modified combination obtained through the use of modern biotechnology or genetic editing.
- A gene in GM crop is artificially inserted instead of the plant that acquires the gene by pollination.
- The resulting plant is said to be “genetically modified” although in fact, by domestication, selection and controlled reproduction, all plants were genetically modified from their original wild condition over long periods.

Pros

- They help the nation with its ability to achieve food security.
- They are resistant to pests and in many ways protect the environment.
- These have a better taste and a longer lifespan.
- They contribute less towards pollution.
- They offer better health and nutritional benefits.
- They contribute to reduce export dependency.
- They will give farmers higher revenue.

Cons

- Although the environmental gain is considered positive, their exact benefits have not been proven and there are risks for the climate.
- They have a range of health issues as researchers point

out.

- The suppliers of seeds will monopolize the industry.
- Once the plague gets used to the transition, it will resist and it is a long-term possibility.
- **India is reportedly farming BT Cotton only** and is the the fourth biggest grower of it in the world.
- **Genetic Engineering Appraisal Committee (GEAC)** is apex body under Environment Ministry for regulating manufacturing, use, import, export and storage of hazardous micro-organisms or genetically engineered organisms (GMOs) and cells in the country.
- It is also responsible for giving technical approval of proposals relating to release of GMOs and products including experimental field trials.