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Prelims PYQ, Mains model answers, and copy evaluation. Write to the desk for this paper, a doubt, or the AI waitlist.

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Q16

How can biotechnology help to improve the living standards of farmers?

UPSC Civil Services Mains 2019 · GS III · 15 marks · Crops, Irrigation and Marketing

Major crops - cropping patterns in various parts of the country; different types of irrigation and irrigation systems; storage, transport and marketing of agricultural produce and issues and related constraints; e-technology in the aid of farmers.

Facts & figures for this PYQ only.

Numbers move. Confirm the latest Budget, Economic Survey or census round. This sheet is for revision, not a substitute for the model answer.

<https://wrapexams.com/upsc/mains-answers/gs-3/2019/how-can-biotechnology-help-to-improve-the-living-standards-of-farmers/>

Bt cotton

India's main commercial GM crop; reduced bollworm sprays for years, later challenged by resistance and seed cost.

GEAC

Genetic Engineering Appraisal Committee: Union biosafety authority for environmental release of GM organisms.

Biotech-KISAN

DBT scheme of farmer-centric biotech hubs that take lab tools to agricultural clusters.

Marker-assisted selection

Breeding that uses DNA markers to speed traits such as disease or drought tolerance without necessarily inserting a foreign gene.

FMD vaccination

Mass livestock vaccination against foot-and-mouth disease; a biotech-enabled public good that protects small dairy assets.

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