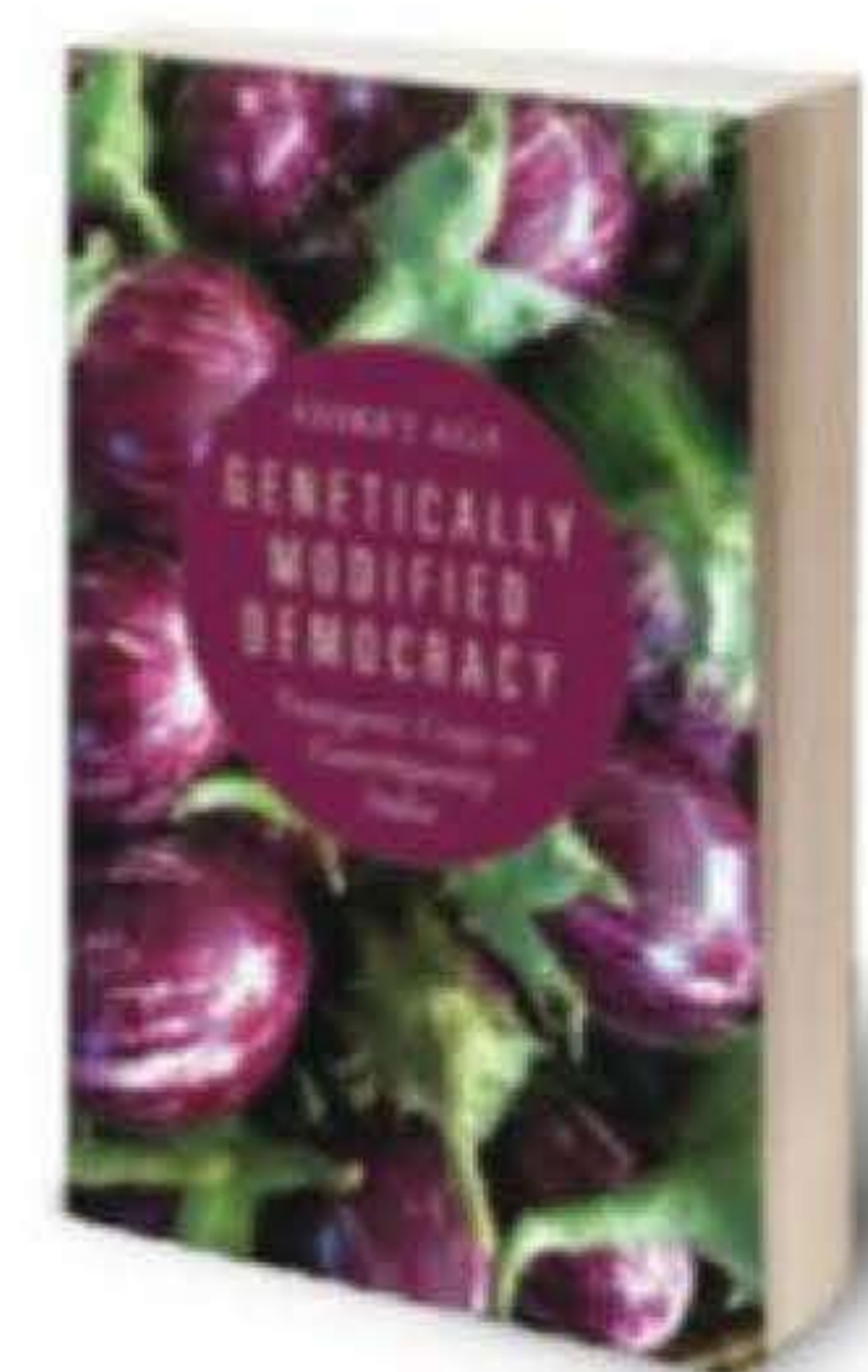


# A brinjal that democratised science in India

ANIKET AGA EXAMINES THE INTERPLAY OF SCIENCE AND INDIA'S COMPLEX POLITICS IN *GENETICALLY MODIFIED DEMOCRACY*

**LATHA JISHNU**



**Genetically Modified Democracy: Transgenic Crops in Contemporary India**

by Aniket Aga

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**O**N FEBRUARY 9, 2010, when Jairam Ramesh, the then Union Minister of State for Environment and Forests, announced an indefinite moratorium on the release of the genetically modified (GM) Bt brinjal, it was celebrated as the democratisation of science. It was a singular triumph, the victory of a people's struggle of well over a decade to have a say, for the first time, in the kind of food they did not wish to eat as well as on the larger questions of protecting the environment from a suspect technology and safeguarding the future of India's farmers, who were in acute distress.

Ramesh's decision, which went against the wishes of his Prime Minister Manmohan Singh who was a strong votary of GM crops, is unthinkable in today's India. The Narendra Modi government does not set much store by the considered opinion of experts, activists or public opinion and has sparked outrage in the scientific community by issuing gag orders to scientists—not related to GM crops—and by pushing for the commercial release of a GM mustard that is herbicide tolerant. The 2010 decision by a junior minister in the Congress-led UPA (United Progressive Alliance) government was remarkable in many ways. It was preceded by wide-ranging consultations with scientists—

Indian and international—farm experts, sustainable farming proponents and, most extraordinary of all, huge public meetings where ordinary citizens were invited to make their case.

The campaign against Bt brinjal tested the limits of democracy on a complex scientific matter for the first time in a country known for its top-down approach. It brought together a vast and disparate collective of farm activists ranging from high-profile globally known figures and battle-hardened veterans of the sustainable agriculture movement to the medical fraternity, nutritionists and grassroots seed saviours. It was a movement that forced state governments and different ministries in the Central government such as Health and Family Welfare, Food, and Consumer Affairs to take a stand on GM crops, pitting them directly against the Department of Biotechnology and the regulatory agencies.

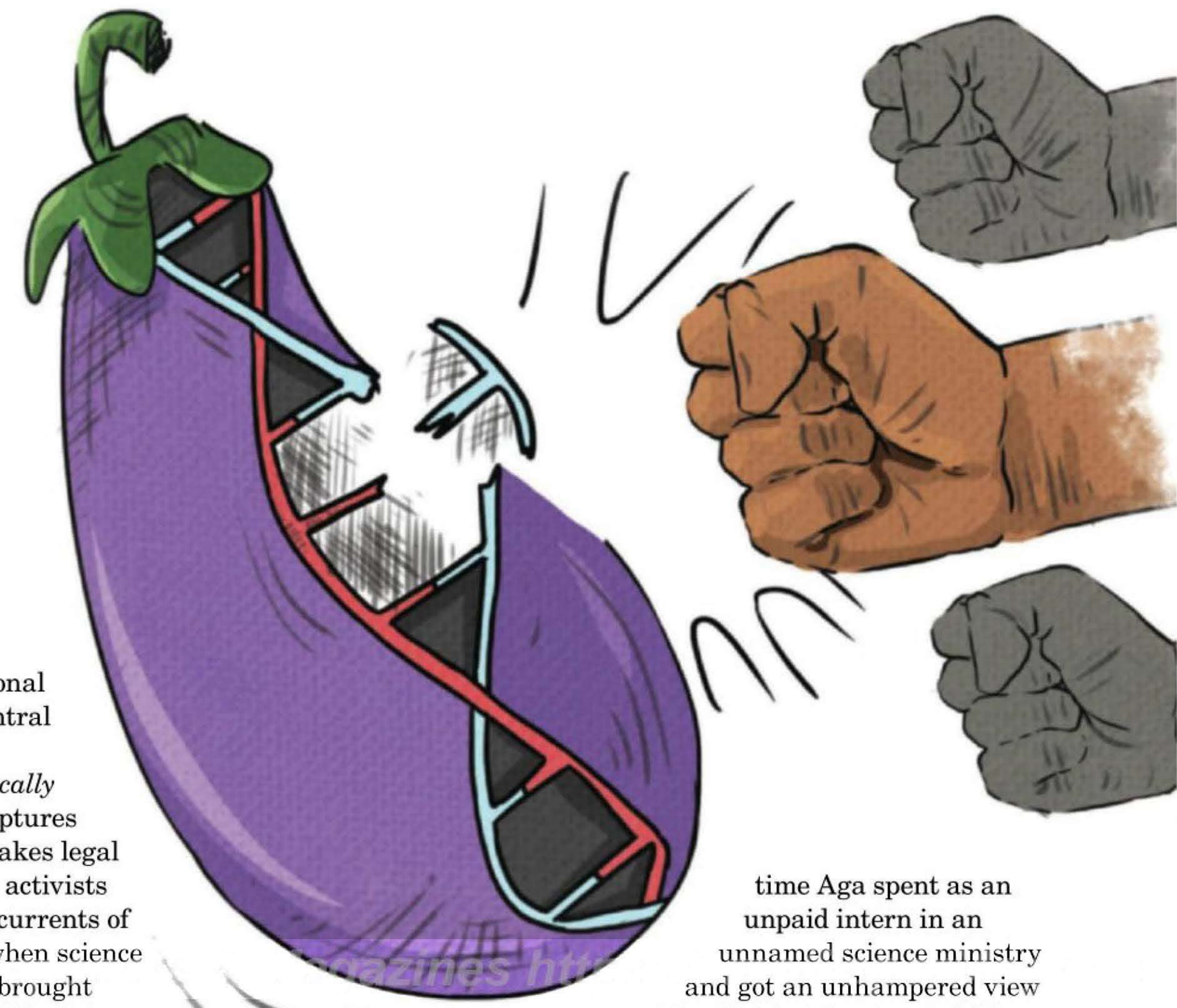
Fought in different forums, from the Supreme Court down to other lesser state institutions, the

**THE MORATORIUM ON RELEASE OF BT BRINJAL WAS A WIN FOR PEOPLE'S STRUGGLE TO HAVE A SAY IN THE FOOD THEY DO NOT WANT TO EAT**

anti-GM brigade challenged the regulatory structure and compelled parliament to take a deep and objective look at the question. State governments from the left to the extreme right were forced to take positions on this technology like never before in the country's agricultural history. It pitted parties and regional politics against the Central government.

Aniket Aga's *Genetically Modified Democracy* captures the tumult, the high-stakes legal challenges mounted by activists and the political undercurrents of that turbulent period when science grabbed attention and brought GM food into everyday life of the nation. It is a splendid book that examines the interplay of science and the complex politics of India against the historical backdrop of the push for biotechnology in the country.

Academics elsewhere have engaged with the question of how democracy has been tested by GM crops. In *GM Food on Trial—Testing European Democracy*, Les Levidow and Susan Carr explained how the controversy over this technology created a legitimacy crisis in the EU and resulted in changes in the bloc's agriculture biotechnology regulations. When Europeans were told they had to accept biotechnology in their agriculture, it turned into a test of democratic values. Did people have a choice in the food they ate, which many of them termed " Frankenfoods"? The authors say in their 2012 book that the public controversy has kept the agri-biotech industry on



the defensive for over three decades.

But there are few similarities in the developed world to the Indian experience, which poses a deeper challenge to our understanding of science and democracy because of the complex and unequal power structure here, argues Aga, who spent 10 years researching this book. For one, he keeps in mind the grim agricultural scenario here, where well over 300,000 farmers have committed suicide in the two decades ending in 2016.

*Genetically Modified Democracy* focuses as much on capturing ethnography of science policy-making as on the democratic responses to the Bt brinjal uproar from different sites of the controversy to provide a richly textured study. Two of these sites provide astonishing insights. One is from 'The Everyday Life of Regulation', an account of the

time Aga spent as an unpaid intern in an unnamed science ministry and got an unhampered view of the disjointed state of affairs under which the regulatory bodies functioned. The other, more significant, arena pivotal to the GM crops debate is the retail trade in seeds. Aga spent several months in the farming areas of Nashik district in Maharashtra to get a ground view of the role of chemical inputs in everyday farming. This writer would strongly recommend the chapter titled "Merchants of Knowledge" to bureaucrats, journalists and activists to understand the vice-like grip the seed industry and the retail trade maintain on farming, controlling both the farmer's knowledge of technology and their access to it.

Aga himself provides the tragic irony to the democratisation debate. While the country was in ferment over a GM food crop, he says that to farmers, GM or Bt was just a new brand of seed! No Indian language, he points, out has an equivalent term for GM. **DE**

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