

Special Issue: Mapping the Global Food Landscape

Section VI Genetic resources and agricultural biotechnology

Jennifer Clapp¹, Annette Aurélie Desmarais², and Matias E. Margulis³

¹ Canada Research Chair in Global Food Security and Sustainability and Professor, Environment and Resource Studies Department, University of Waterloo

² Canada Research Chair in Human Rights, Social Justice and Food Sovereignty, Department of Sociology, University of Manitoba

³ Lecturer in Political Economy, University of Stirling and Adjunct Professor in International Studies, University of Northern British Columbia

Genetically modified crops have been a lightning rod in debates over the future of food and agriculture over the past two decades. The debate has sparked critical questions about the potential role for science in addressing hunger and in rural development. Corporate actors, with a strong interest in this debate, have actively sought to secure their rights over biotechnology while at the same time promoting the potentials of agricultural biotechnologies. Critics have been equally vocal in resisting and debunking those narratives, seeking to preserve natural plant diversity and ensure open access to plant genetic resources.

Noah Zerbe shows that control over the world's plant genetic resources has shifted through from public to private hands with the advent of agricultural biotechnology. He argues farmers and communities, whose agricultural work builds on thousands of generations of peasants who have been stewards of seeds, have a moral claim to those rights and should be given more voice in policy. Looking at the two decades since GMOs have been widely planted on a commercial basis, Taarini Chopra makes the case that they have failed to meet the promises while raising a host of problems. Instead of relying on a false narrative provided by industry, she argues that we need to learn instead from the situated experience of farmers in their fields. Matthew Schnurr takes a closer look at attempts to promote GMOs in Africa, and shows that science and politics are intermingled in complex ways that are difficult to disentangle. He asks whether GM crops are always the best approach to solving certain agricultural problems.

The papers highlight the persistence of binaries within these contexts. As Wesley Tourangeau and Chelsea Smith make clear in their synthesis paper, the narrative that emphasizes the value of modern scientific plant breeding has the effect of devaluing farmer's contributions to agricultural biodiversity, a bias that sorely needs correcting.