

## **BOOK REVIEWS**

## The Great Climate Robbery: How the Food System Drives Climate Change and What We Can Do About It

## Book by GRAIN

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'The Great Climate Robbery' is a second book to be published by GRAIN, a "small international non-profit organisation that works to support small farmers and social movements in their struggles for community-controlled and biodiversity-based food systems" (grain.org). As stated in the introduction, over the last 25 years GRAIN has been directly supporting social movements and organisations which resist the agenda of corporate farming, while collecting research on the ill effects of the industrialised food system. The book comprehensively brings together research conducted and gathered by GRAIN on the nexus of food production and climate change; much of it is already available on their website. With agrofood systems responsible for around half of global greenhouse emissions (p. vii), the authors are critical of the techno-fix paradigm being pushed by agrofood corporations, and argue instead for placing food sovereignty at the heart of future food systems. The book's journalistic style makes for easy reading, and its well-researched case studies add up to an inescapable conclusion: the food system is broken, its foundations are societal and environmental degradation and exploitation, and to survive on the heating planet we must change the way we grow and the way we eat.

Part 1 of the book details the relationships between food production and climate change,

arguing that the greenhouse emissions from industrial agri-food chains have been much under-estimated, and that they are likely to exceed 50% of all global emissions. GRAIN's vision of a more sustainable food system will be familiar and welcome to many scholars in political ecology and food studies - they stress food sovereignty, agro-ecology, and localised food networks as building blocks of alternative solutions. Section 1.3 sheds light on the vested interests of fertiliser companies in maintaining the fossil-fuel intensive agricultural model, and their entanglement with political power across the Western world. Particularly worrying is the role these companies are playing in pushing for fracking, as nitrogen fertiliser production requires large quantities of natural gas. The Global Alliance for Climate Smart Agriculture is identified as a particularly powerful assemblage of corporate and political power pushing through the interests of fertiliser industries, particularly in Africa. Section 1.4 forcefully critiques REDD+ schemes (Reducing Emissions from Deforestation and Forest Degradation) as undermining rather than supporting small-scale agricultural practices through restricting peasant farmers' access to land while doing nothing to address large-scale drivers of deforestation such as palm oil plantations and industrial farming. "To cool the planet", GRAIN argue, "the world needs more small farmers farming on a greater percentage of the

world's agricultural lands, and less land in the hands of big corporate farms" (p. 31). The authors further critique the emerging trade deals such as CETA (Comprehensive Economic and Trade Agreement) and TTiP (Transatlantic Trade and Investment Partnership) as promoting industrial farming for export over localised food systems and encouraging growing consumption of fossil-fuel intensive food products.

Part 2 puts land sovereignty, particularly land (and water) ownership by indigenous populations, at the heart of a sustainable response to the climate change and food security challenges. Small is not only beautiful, they argue, but more productive, just, and environmentally sustainable than big production. Section 2.3 disentangles the conflicting messages from bodies such as FAO, which claim that the world is currently fed by small scale farming while calling for introduction of more 'efficient' farming methods in the same breath. GRAIN's main messages are that while small farmers are better at feeding people than big farmers, land grabbing and land concentration is putting small farmers in danger world-wide. "Control over land is being usurped from small producers and their families with elites and corporate powers pushing people onto smaller and smaller land holdings, or off the land entirely into camps or cities" (p. 67). The relationships between land and water grabs, the unsustainable water intensity of modern agricultural practices, and the failure of voluntary 'responsible land acquisition' schemes are also discussed here through specific case studies.

Part 3 focuses on seeds. The authors state that the diverse 'seed laws' (which pertain to intellectual property rights as well as e.g. trading rights) 'often result in peasant seeds being decreed illegal, branded as inadequate, and treated as a source of risk to be eliminated' (p. 133), and in essence serve as yet another mechanisms eroding small farmers' ownership of

their means of production. Section 3.3 is specifically dedicated to 'debunking the myths' of GMO seeds as the ultimate techno-fix to global food problems.

Part 4 feels less focused then the previous sections, and seems to be where the remaining material broadly related to power dynamics in food networks was placed. The sections here detail the take-over of peasant farming by large agri-business in China and India, and the expansion of supermarkets in Asia with the consequent negative impacts on local food chains and diets (through e.g. loss of diversity). My interest was caught by section 4.4, in which GRAIN 'follows the money' to discover that, in spite of its claims to serve the farmers, the Gates Foundation channels most of its investment into research centres if the global North, casting the Southern hemisphere 'as recipients, mere consumers of knowledge and technology from others' (p. 186).

The aim of the book is to be a compendium of information and ready-made case studies highlighting environmentally and societally damaging processes and outcomes of corporate agri-food, and the entanglements of political and corporate power. The purpose of the book is not to engage with theoretical issues or academic debates, but to uncover power struggles on the ground - it is certainly more journalistic than academic; as such, it may simplify or over-state some of its points. However, its overall aim of bringing environmentally and societally destructive practices at the heart of the modern food systems into light is an important and urgent one. The book can be a powerful teaching resource in political ecology and food studies courses, offering a ready-made entry point into some of the key conflicts over unequal access to knowledge, resources, and power in the modern food systems.