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The promise and peril of "miracle crops" as vehicles for sustainable development

Book review by
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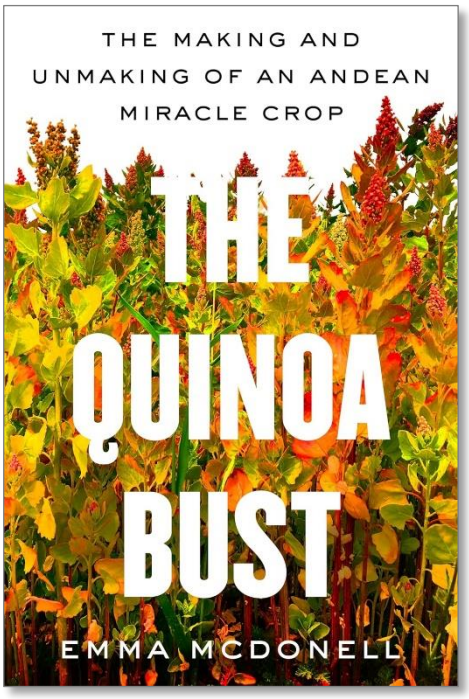

Review of *The Quinoa Bust: The Making and Unmaking of an Andean Miracle Crop*, by Emma McDonell. (2025). Published by University of California Press. Available as hardcover, paperback, and Kindle; 328 pages. Publisher's website: https://www.ucpress.edu/books/the-quinoa-bust/paper; DOI: https://doi.org/10.1525/9780520401723

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In *The Quinoa Bust: The Making and Unmaking of an Andean Miracle Crop,* cultural anthropologist Emma McDonell describes the emergence of quinoa as a global commodity, tracing its transformation from a staple crop of the Andean Altiplano to a "miracle food" sold at grocery stores worldwide. Quinoa's transformation is driven by its promise to alleviate poverty among indigenous smallholders in the Altiplano while at the same time addressing malnutrition in urban communities in the region. McDonell charts how these at times contradictory objectives are pursued by a cast of actors along the global supply chain, each projecting and acting on their own aspirations for quinoa. Drawing on deep ethnographic work, she follows farmers, cooperatives, *técnicos* (private extension agents), processors, and buyers in Puno, Peru, over a 10-year period as they navigate the volatile quinoa economy.

While the book's title foreshadows the inevitable *bust* of quinoa, the book presents a much more nuanced accounting of the distribution of impacts

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from quinoa's rise and fall across its many stakeholders. In the book's first section, "Miracle Crop," the actions of local actors are presented against the backdrop of efforts by national governments and international NGOs to promote quinoa as a vehicle for sustainable development. The second section, "Boom," describes the rapid rise of quinoa and its attendant market forces. The boom created "profound changes in [the] livelihoods and landscapes" of farmers in the Altiplano (p. 93), including shifting their production from diverse crop rotations to an intensive monoculture to capitalize on rising quinoa prices, adopting a narrow set of quinoa varieties designed to meet processer and consumer preferences, and struggling to comply with standards and practices imposed by buyers and organic certification. Promoted through the frontline *técnicos*, these changes were grounded in the demand for a uniform quinoa product, which could be aggregated across farms and flow as a single "golden stream" through global markets (p. 123). These agronomic-focused changes were accompanied by socio-cultural changes in the ways in which quinoa was marketed and consumed. Culinary and cultural elites sought to distance quinoa from its origins as an "Indian food" associated with poverty and indigenous heritage, and reinvent it as a miracle food that could be marketed to a global clientele. This framing sought to tap into the narrative-driven "fashion cycles" of food markets that seek novelty and authenticity in food products (p. 57).

The third section describes the "bust" that was spurred by the decentralization of quinoa production and collapse of prices in 2014–2015. Soaring prices brought on by the boom prompted farmers in other parts of Peru, the Andes, and the world to cultivate quinoa, thus completing its transformation into a global commodity. Despite their deep connection to the crop, Andean smallholders were poorly positioned to compete with new, better-resourced producers in the global marketplace. The bust's impact on Andean farmers was exacerbated by the rejection of shipments of Peruvian quinoa by the U.S. Food and Drug Administration in 2014–2015 due to chemical residues. The contamination exposed the challenge of traceability for global commodities and raised questions about the reliability of organic certification. It also undermined the trust built between farmers and buyers that had propped up the supply chain. The uneven fallout from the collapse in prices and rejected quinoa shipments exposed the fragility of that trust as well as the power asymmetry between these groups.

The social and ecological changes brought on by the boom left Andean farmers exposed both to market forces and to a changing climate. Many farmers departed from their traditional production systems, which featured diverse varieties of quinoa, types of crops, and sources of income, to focus on commercial quinoa production. While McDonell offers us glimpses into the impacts on farming communities in Puno, the book does not delve into specific farm-level consequences. It instead relies on *técnicos* and local processers as the central narrators of the story. Frequently born in rural Altiplano communities but educated in Peru's urban centers, *técnicos* served as intermediaries between these two worlds during quinoa's commercialization—translating buyers' demands to farmers and farmers' realities to buyers. This lens neglects some of the inter- and intrahousehold dynamics guiding farmers' decisions, including differences across different generations and genders. We are also not afforded a view of the impacts of quinoa's global commodification on Peruvian consumers, who from the outset were supposed to have benefited from improved access to the nutrient-dense grain. The reader must speculate, or consult other sources, about how global demand has impacted local access to this longtime staple in Peru.

Nevertheless, *The Quinoa Bust* demonstrates the limitations of any crop—miracle or not—to address the complex challenges of marginalized communities. We come to understand that quinoa could not possibly have lived up to the development goals of lifting its traditional producers out of poverty *and* lifting local communities out of malnutrition. It was inevitable that market forces would shift the geographies of production and consumption as quinoa emerged as a global commodity. Similarly, it was inevitable that racial, class, and economic power structures would dictate the accumulation of benefits and risks among participants in the quinoa supply chain.

McDonell draws on James Ferguson's critique of international development in *The Anti-Politics Machine* to describe the "depoliticization" of power structures in Peru (rendering them technical issues requiring technical fixes) and the pursuit of "standardized solutions" to "development problems" that ignore local realities (p. 125). The book also shows the limits of using marketing tools, such as organic certification and origin branding, by smallholders to differentiate their products from commodities and extract greater value. The closing section of the book presents a clear-eyed look at the collective action required to form and maintain a cooperative brand. McDonell makes the case that studies of *existing* brands are biased towards success, since those groups have already overcome startup barriers. The author's critical analysis of these strategies provides timely lessons for development practitioners and policymakers seeking to reimagine foreign assistance in the wake of recent geopolitical changes.

Reference

Ferguson, J. (1994). *The anti-politics machine: "Development," depoliticization, and bureaucratic power in Lesotho*. University of Minnesota Press.