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Agro-industry at the center: How do communities on the edge respond?

Book review by
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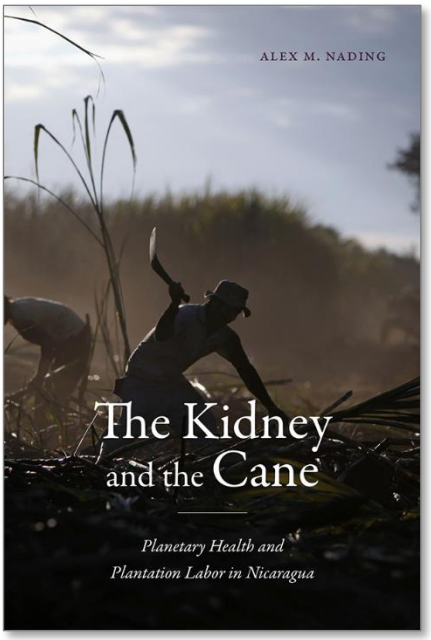

Review of *The Kidney and the Cane: Planetary Health and Plantation Labor in Nicaragua*, by Alex M. Nading. (2025). Published by Duke University Press. Available as paperback and hardcover; 240 pages. Publisher's website: https://www.dukeupress.edu/the-kidney-and-the-cane

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Alex Nading's second book focuses primarily on the communities that surround a Central American sugarcane operation—yet it spans the local to the global with a masterful combination of participatory observation, archival research, and theoretical reflection. The Asociación Montelimar Benedición de Dios (AMBED) represents around 700 rural Nicaraguan people who identified as "workers, former workers, residents and members of the communities belonging to the Montelimar Sugar Mill" (p. x). The World Bank has massively funded extensions of the sugar mill operation. AMBED registered a complaint to the Bank's Compliance Advisor/ Ombudsman (CAO) which set up negotiations with the company. AMBED creatively brings "knowledge of the ground" to these negotiations for "life supports" for themselves and their communities. Nading characterizes "life support systems" as always temporary, whether they be the agrochemicals, harvesting equipment and irrigation canals supporting sugarcane, the hemodialysis machines supporting those with Chronic Kidney Disease of non-traditional origin (CKDnt) in the sugarcane zone, or "projects addressing the cris[e]s of the Anthropocene"

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(p. xiv). He concretizes the Rockefeller Foundation–Lancet Commission on Planetary Health's emphasis on the earth's life-support systems for human health and well-being. He sensitively analyzes

> how people grapple with life support systems, from legal frameworks like the CAO to irrigation works, to pesticide application regimes, to state-sponsored social security programs, to occupational health measures, to dialysis treatment itself. . . . [He] suggests that a close look at what happens along the unstable edges where life support systems meet might provide insights into the possibilities and limitations of planetary health. (p. xiv)

Nading positions himself "alongside rural Nicaraguans living in the sugarcane zone as an engaged observer" (p. viii), including using research funds to pay for AMBED activities in which he becomes involved. He understands AMBED as part of a social movement of sugarcane workers globally, but without overromanticizing their environmental justice role. As a critical social science scholar, drawing on decades of scholarship on plantation life, he explores "how actions taken in small, seemingly out-of-the-way places, such as the villages that dot the Nicaraguan sugarcane zone, reverberate across the globally dispersed spaces of capitalism and global health" (p. 5). He regards planetary health as still a question, telling a story about it "not as an encompassing condition but as an ongoing, messy, paradoxically very local process" (p. 6), a refreshing contrast to the more usual strident, universalist discourse.

Each of the core six chapters explores how people grapple with a subsystem that is fundamentally designed to support plantation life, the human life of laborers and residents, and the life of the sugarcane monoculture itself. Other involved members of these agro-ecosystems—domestic dogs and rats in the cane, the few remaining forest remnants, hedgerows of trees, and garden vegetables—are unfortunately all classified under the term "non-humans,' perhaps exemplifying a persistent anthropocentrism. Chapter 2 focuses on the occupational health of cane workers and the role of heat stress as the leading accepted cause of CKDnt, exacerbated by climate change. At the same time, he notes that "the systematic push to find ways of continuing to profitably produce sugarcane under conditions of extreme heat was paralleled by efforts of non-workers, particularly women, to make knowledge claims about the slower and more accretive changes in climate wrought by chemically driven cane production" (p. 16). Chapter 3 shifts to an analysis of the vast irrigation network required for growing sugarcane in Central America's Pacific littoral zone:

> For AMBED, waterways were a means of both dividing and connecting plantation and non-plantation space, work and home, and human and nonhuman life. The embankments of irrigation canals, dams and pipes, as well as beaches and riverbeds, turned out to be effective places not just for producing evidence of the impact of sugarcane production on bodies but also for flipping the terms on which CKDnt could be understood—from a disease of agricultural production to a disease of social reproduction. (p. 16)

Among the most pressing concerns for AMBED was herbicide spraying of the cane. Chapter 4 describes "how people in the sugarcane zone worked to make toxicity legible through a variety of media, including the oral sharing of stories and the exchange of videos and photographs on platforms like Facebook and WhatsApp" (p. 17).

Nicaragua's national social security system is a life support system for injured and ill formerly productive workers, but also for sugarcane production—"to rescue the industry from itself" (p. 17), similar to the extensive subsidies to North American agro-industry. "The villages in which sugarcane residents live and die are physically located on the ecological and economic edges of monocrop production systems" (p. 19), similar to many farming contexts where farmers, farmworkers, and their families may live in the midst of fields. Hence ensued messy negotiations on which bodily and ecological conditions count as "working conditions," for social security support (chapter 5). A key outcome of AMBED's mediated settlement

with the Montelimar Corporation was "access to hemodialysis for dozens of former workers with late-stage kidney disease" (p.17). But these necessitate arduous and costly journeys to and from Nicaragua's capital, Managua—similar to the journeys that North American farm residents undertake to access specialized care.

Nading makes a convincing case that "a critical approach to planetary health is that there is no way of returning to a 'before,' when life support systems worked better" (p. 19), and that "planetary health still remains something of an aspiration" (p. 20). Less convincing is his assertion that planetary health "as a grassroots project . . . has already begun, in an unlikely place: on the edge of the sugarcane zone" (p. 20). Other examples globally might better convey a "good news story" for which activist NGOs and environmental justice advocates hope. Perhaps engaging with uncertainty and trying to make sense of the multiple interacting systems composing the whole, rather than focusing on either the center or the edges alone, is a more appropriate stance for many of us who want more health-sustaining change in agriculture and food systems.