

Getting into the weeds: Vandana Shiva calls for an alternative to industrial agriculture

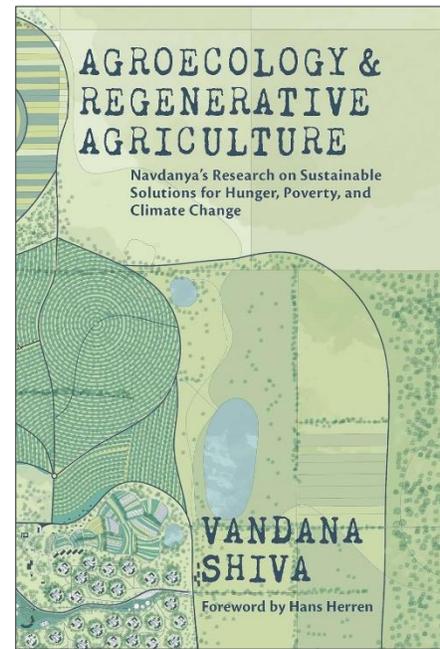
Book review by

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Review of *Agroecology and Regenerative Agriculture: Sustainable Solutions for Hunger, Poverty and Climate Change*, by Vandana Shiva. (2022). Published by Synergetic Press. Available as paperback and eBook; 344 pages. Publisher's website:

<https://synergeticpress.com/catalog/agroecology-and-regenerative-agriculture-sustainable-solutions-for-hunger-poverty-and-climate-change/>



Submitted December 16, 2024 / Accepted January 3, 2025 / Published online January 15, 2025

Citation: Marchessault, A. (2025). Getting into the weeds: Vandana Shiva calls for an alternative to industrial agriculture [Book review]. *Journal of Agriculture, Food Systems, and Community Development*, 14(1), 519–521. <https://doi.org/10.5304/jafscd.2025.141.029>

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In a world where industrial agriculture dominates, Vandana Shiva's *Agroecology and Regenerative Agriculture: Sustainable Solutions for Hunger, Poverty and Climate Change* asks a pivotal question: Can we transform our food systems to heal the planet and its people? Shiva's work challenges conventional farming, advocating for a future of regenerative, organic agriculture. Shiva is an inspiring scholar

and activist with expertise in food sovereignty, ecofeminism, and commoning. Drawing on decades of research conducted at her farm, Navdanya, and global examples from scholarly literature, she argues that regenerative agriculture is both viable and essential for tackling the interconnected crises of hunger, poverty, and climate change. In this book, Shiva takes the reader through six distinct agricultural issues with overlapping themes: seeds of biodiversity, soil and water, climate change solutions, biodiversity for pest control, food nutrition and health, and farmer livelihoods and rural economies.

Shiva weaves together ecological, economic, and health crises as they relate to food, suggesting that the current food paradigm not only allows

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these crises to persist but actively endorses them. Shiva criticizes industrial agriculture's reliance on reductionist metrics—such as yield—by comparing it to GDP in its failure to account for broader systemic impacts. She describes how industrial farming practices produce nutritionally empty, toxic commodity crops, many of which are used as livestock feed and biofuels. She proposes that in place of yield, we use metrics like “nutrition per acre” to better account for the human health implications of farming practices.

In addition to these novel metrics, the book introduces the reader to essential concepts like biodiversity, regenerative agriculture, and agroecology. To people unfamiliar with these concepts, however, this book may seem to conflate agroecology and regenerative agriculture. Agroecology, by nature, combines ecological principles with social and economic considerations for systemic change in the agri-food system regarding climate, food, ecosystem crises, and social injustices. Shiva first defines agroecology as “the science of ecology applied in agriculture” (p. 15), missing its broader socio-political foundation. The book goes on to describe many of the social and political dimensions of the food system, but it would have been more effective to explicitly frame these within agroecology to provide a more comprehensive understanding of the term.

The bulk of the book digs deep into regenerative on-farm practices that benefit soil health, ecology, biodiversity, and water resources. Shiva's insights on seeds effectively illustrate the destruction of agroecological systems under the control of industrial agriculture. This section highlights how the processes of privatization, centralization, and corporate dependency not only undermine farmer livelihoods but also intersect deeply with the ecological challenges explored in subsequent sections. Shiva beautifully illustrates the connections between human and more-than-human life through the motif of soil: “Humus, which is the Latin word for living soil, is also the root of ‘human.’ We are connected to the soil. When soils are healthy, societies are healthy. When soils are sick and desertified, societies become sick” (p. 264). She criticizes the industrial agricultural system's disregard for soil health, naming the far-reaching consequences of

the Green Revolution in India—including chemical runoff, declining farmer well-being, and negative health impacts—while dismantling the myth of industrial efficiency. She equips the reader with practical techniques to promote sustainable farming practices while backing up her claims with peer-reviewed literature and lots of data. Shiva's passion for and experience with regenerative farming shine through in her writing, giving her arguments authenticity and conviction.

An underlying theme in this book is that regenerative agroecosystems are more ecologically and economically efficient. Shiva challenges the misconception that industrial agriculture produces higher yields and higher incomes, providing evidence to the contrary. However, this analysis unsuccessfully addresses the labor or consumer cost implications of a shift to regenerative and organic systems. Questions about who will perform this additional labor, how to ensure fair labor protections, and how prices and markets may affect consumer food security remain unexplored, leaving a critical gap in the discussion.

The book is packed with compelling facts refuting industrial agriculture, such as “Industrial agriculture that relies on fossil-fuel intensive, chemical-intensive monocultures uses 75% of the land yet produces only 30% of our food supply while small, biodiverse farms utilizing 25% of the area produce 70%” (p. 168), and “fifteen plant and animal species supply 90% of our food” (p. 187). However, the sheer amount of content covered may overwhelm readers, leaving them unable to fully grasp these glaring statistics. Some sections feel overly dense for newcomers, while others lack the depth expected by more advanced readers, leaving the intended audience unclear.

Reminiscent of, and perhaps inspired by, Rachel Carson's *Silent Spring*, Shiva uses the beauty and wonder of natural systems to argue against industrial agriculture. Shiva's writing offsets technical rigor with a deeply personal tone. Shiva conveys her own experiences and passion in the pages, connecting the reader more deeply with the violence of the current food system. Ultimately, *Agroecology and Regenerative Agriculture* is a valuable resource for those with a foundational understanding of sustainable agriculture. It offers practical

solutions and a compelling critique of industrial farming but struggles to fully synthesize its wealth of material into a cohesive narrative. Despite its

limitations, Shiva's passionate advocacy for a regenerative future inspires readers to reconsider the hidden costs of conventional food systems. 