

## Green Revolution to Seeds of Suicide: Depicting violence of Industrial Farming through Vandana Shiva's *The Violence of the Green Revolution*

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### Abstract

The Violence of Industrial Farming from Green Revolution to Seeds of Suicide analyses how the high-input agriculture paradigm introduced by the Green Revolution has led to ecological destruction and human suffering. This paradigm, which promised food security through hybrid seeds, chemical fertilizers, and monocultures, instead degraded soil fertility, heightened climatic vulnerability through carbon emissions and dependence on fossil fuels, and incited societal disputes over resources. In India, it transformed into "seeds of suicide," resulting in over 300,000 farmers succumbing to debt from patented inputs and crop failures during the 1990s, as criticised by Vandana Shiva. Industrial activities are depleting topsoil at alarming rates, with 33% of worldwide arable land damaged. Additionally, pesticide runoff generates marine dead zones and affects biodiversity, contributing to instability. Inputs originating from fossil fuels entrap agriculture in a carbon-intensive cycle, exacerbating climate change despite increases in production. Smallholders experience displacement and economic exploitation when multinationals monopolise seeds and markets, leading to demonstrations and suicides due to prohibitive inputs and fluctuating pricing. This reallocates authority from communities to agriculture, exacerbating inequalities. Organic and agro ecological alternatives enhance soil carbon, reduce emissions, and empower farmers via resilient, localised systems, providing a counterbalance to the detrimental effects of industrial agriculture.

**Keywords:** Green Revolution, Ecology, Industrial Farming, Ecocriticism, Violence.

## INTRODUCTION

The Green Revolution was an agricultural initiative initiated in the 1960s aimed at augmenting food production via the utilisation of high-yielding variety seeds, fertilisers, irrigation, and machinery. It facilitated India's self-sufficiency in food production, however engendered environmental and societal issues (Raeboline et al. 1-10). Industrial farming is a contemporary method that regards agriculture as an industry, emphasising extensive output, substantial technology, and chemical application. Although it enhances productivity, it harms the environment and fosters dependency among farmers on businesses. Vandana Shiva condemns both systems for their detrimental effects on environment, fostering farmer dependency, undermining traditional agriculture, and exacerbating inequality; nonetheless, she advocates for organic and sustainable agricultural practices. Vandana Shiva is a distinguished Indian environmentalist, philosopher, and activist recognised for her contributions to ecology, agriculture, biodiversity, and social justice (Wanger et al. 1-42). Her writings and initiatives emphasise the protection of environment and the rights of farmers, particularly with globalisation and corporate dominance. She established Navdanya to advocate for seed preservation and organic agriculture. In works such as *Staying Alive* and *The Violence of the Green Revolution*, she underscores ecological and socioeconomic inequities. Her concept prioritises Earth Democracy and sustainable development. *The Violence of the Green Revolution* (1991) examines the repercussions of the Green Revolution in India, illustrating how chemical agriculture and monoculture resulted in environmental degradation, farmer indebtedness, and social discord. Through her writings, initiatives, and campaigns, she has persistently resisted environmental devastation and corporate dominance over natural resources (Shahin, Abdur Rahman; Neloy 110-121). She embodies a powerful advocate for sustainable development and the rights of farmers in India and globally. She was born on November 5, 1952, in Dehradun, Uttarakhand, India. Her father was a forest

conservator, and her mother was a farmer; growing up around woods and farms instilled in her a profound reverence for nature. She obtained her B.Sc. in Physics, M.Sc. in Philosophy of Science, and Ph.D. in Philosophy of Science from the University of Western Ontario, Canada. Her scientific expertise enabled her to properly analyse environmental challenges. Vandana Shiva was first educated as a biologist, but then transitioned to environmental and social action after observing: Deforestation in the Himalayas, issues arising from industrial agriculture, erosion of farmers' autonomy. She integrated science, ecology, ethics, feminism, and indigenous knowledge into her thought process. She strives to save forests, rivers, soil, seeds, and biodiversity. She contends that nature possesses inherent worth and ought not to be exploited for financial gain (Wanger et al. 1-42). Vandana Shiva fervently promotes sustainable agriculture via organic farming, mixed cropping, seed preservation, and natural fertilisers, while denouncing genetically modified crops, chemical agriculture, and industrial farming, contending that environmentally sustainable techniques provide food security and ecological well-being. She advocates for farmers' rights by endorsing seed freedom, equitable pricing, and autonomy from corporate dominance, while condemning multinational corporations for monopolising agricultural resources. As a prominent ecofeminist theorist, she correlates the subjugation of nature with the oppression of women and emphasises women's essential contribution to the preservation of biodiversity and food systems. She challenges corporate globalisation, the privatisation of water and crops, and patents on life forms, asserting that these adversely affect local communities (Shrestha and Horwitz 288-307). In 1991, she established Navdanya to preserve indigenous seeds, create community seed banks, educate farmers in organic agriculture, and safeguard seed sovereignty. Through significant publications such *Staying Alive*, *The Violence of the Green Revolution*, and *Who Really Feeds the World?* She integrates research with action. Her idea of Earth Democracy, seed sovereignty, and living economies underscores ecological ethics, communal governance,

and local autonomy. Through writing, lectures, legal action, and grassroots movements, she connects local problems to global challenges. She has received accolades such as the Right Livelihood Award and the Sydney Peace Prize, establishing herself as a prominent figure in modern environmentalism by confronting corporate power, advocating for sustainability, and furthering ecofeminist ideology. In *The Violence of the Green Revolution*, Vandana Shiva analyses the agricultural reforms implemented in India during the 1960s, characterised by high-yield seeds, chemical fertilisers, irrigation, and modern machinery, particularly in Punjab, Haryana, and western Uttar Pradesh (Shiva, *The Violence of the Green Revolution* 1991). She contends that while these reforms augmented food production, they engendered concealed forms of ecological, economic, and social violence. She elucidates that the overuse of chemicals, monoculture practices, and excessive irrigation have compromised soil health, water resources, and biodiversity, while expensive inputs have indebted farmers and exacerbated rural inequality, resulting in social discord and political instability (Yasir et al. 1-35). Shiva condemns contemporary scientific agriculture for prioritising production while neglecting environmental and human repercussions, thereby undermining traditional, diversified, and sustainable farming methods. She illustrates how farmers forfeited self-sufficiency and became reliant on companies and markets, use Punjab as a case study to expose the ephemeral and deceptive nature of Green Revolution "success." She refutes the notion that more output equates to development, asserting that genuine growth must be ecologically sustainable, socially harmonious, and economically equitable (Adkoli 32-36). She consequently advocates for sustainable alternatives like organic agriculture, intercropping, seed variety, indigenous knowledge, and community governance. The book's central thesis posits that although the Green Revolution yielded immediate benefits, it inflicted enduring damage on the environment, farmers, and rural communities, rendering it a manifestation of structural violence.

Consequently, the book serves as a significant critique of contemporary development and a pivotal work in environmental and development studies.

## **ENVIRONMENTAL STUDIES AND LITERATURE**

Environmental Studies and Literature is an interdisciplinary area that connects scientific knowledge of the environment with creative and critical literary expression (Wajid 50-57). Environmental Studies investigates both natural and anthropogenic environments, encompassing ecosystems, biodiversity, climate change, pollution, deforestation, and the sustainable use of resources. It elucidates the impact of human actions on nature and the management of environmental issues through conservation and sustainable development (Shahin, Abdur Rahman; Nelay 110-121). Literature significantly influences individuals' perceptions of the surroundings. Writers articulate their connection to nature via poetry, novels, essays, travel literature, and plays, depicting its beauty, cautioning against environmental degradation, and condemning detrimental human behaviours. Numerous literary works advocate for ideals like ecological harmony, reverence for all life forms, and environmental stewardship. The integration of Environmental Studies and Literature fosters environmental awareness, ethical sensitivity, and critical thinking skills. It encourages readers to reflect on their role in protecting nature and inspires them to act for environmental conservation (Meeran 9-15). This field also helps people live in a way that is good for the environment by encouraging the concept that human growth and environmental protection should be balanced. In general, Environmental Studies and Literature work together to teach, inspire, and encourage people to have a better and more sustainable connection with the natural world.

## GREEN REVOLUTION AND INDUSTRIAL FARMING

The Green Revolution was a movement in farming that started in the 1960s. Its goal was to make more food and make sure everyone had enough to eat, especially in developing nations like India. It brought in high-yield variety (HYV) seeds for crops like rice and wheat, as well as the widespread use of chemical fertilisers, pesticides, sophisticated irrigation systems, and farm machinery (Hans et al. 13-19). These approaches made crops far more productive and helped countries get through famines and food shortages. Punjab, Haryana, and western Uttar Pradesh were the parts of India that profited the most, making the country self-sufficient in food grain production. The Green Revolution brought about several social and economic changes in addition to higher productivity. Big and rich farmers had an easier time since they could buy expensive seeds, fertilisers, and machineries. Small and marginal farmers, on the other hand, typically had trouble with growing expenses. This caused rural regions to be unfair. Farmers also had to rely on outside things like chemical fertilisers and hybrid seeds, which made their costs go up. Industrial farming came because of these new ways of farming. It is farming on a vast scale for business that aims to make as much money and produce as much as possible. Industrial farming depends a lot on machines, producing only one crop over wide areas (monocropping), chemicals, genetically modified seeds, and raising animals in factories. Its goal is to grow a lot of food cheaply for markets in the US and across the world. Industrial farming has made food more available and cheaper, but it has also generated major concerns for the environment. Using chemical fertilisers and pesticides all the time has made the land less fertile, contaminated water supplies, and damaged insects and animals that are good for the environment. Too much watering has caused a lack of water and salty soil (Sannigrahi et al. 1-23). Monocropping has decreased biodiversity and increased the susceptibility of crops to pests and illnesses. Overcrowding and poor waste disposal in animal production have made health and environmental problems worse. The Green Revolution and

industrial farming changed traditional farming into a contemporary method that uses technology. They assisted with food security and economic prosperity, but they also caused environmental problems, social inequalities, and problems with long-term sustainability. Because of this, many experts now favour organic and sustainable farming methods that safeguard the environment, help small farmers, and make sure that food is grown in a way that is good for the environment.

### **ECOLOGICAL VIOLENCE OF INDUSTRIAL FARMING**

Ecological violence is when people do things that upset the equilibrium of the environment and destroy nature and living systems. In the context of industrial farming, it signifies the longterm harm done to soil, water, air, plants, animals, and ecosystems by farming methods that are focused on making money. The Green Revolution led to industrial farming, which employs a lot of chemicals, machines, monocropping, and genetically engineered seeds to get the most out of each crop. It boosts short-term yields, but it harms the environment in the long run. There are several things which shows the overall degradation that are soil degradation and loss of fertility, instead of using natural compost and manure, industrial farming depends primarily on artificial fertilisers. Using these chemicals all the time breaks down organic matter in the soil, kills helpful microbes, and makes the soil weaker. The earth gets harder, drier, and less fruitful as time goes on. Too much ploughing and the use of machines can also cause soil erosion, which washes away the topsoil that is rich in nutrients. Because of this, farmers must use more fertilisers every year, which makes things worse (Adoración Barros-Rodríguez, Rangseekeaw et al. 1-10). Then water pollution and depletion when irrigating large-scale farms takes a lot of water. Taking too much groundwater out of the earth lowers water levels and makes it hard to get water, especially in areas where farming is important. Rain and runoff from irrigation wash pesticides and chemical fertilisers into

rivers, lakes, and groundwater. This makes drinking water dirty and hurts marine life. Nitrates and other harmful substances may make people and animals sick, which makes water dangerous to drink (Aktar et al. 1-12). It also affects the loss of biodiversity in which Industrial farming encourages monocropping, which is growing only one type of crop across a broad region. This approach substitutes a variety of conventional crops and degrades natural ecosystems. Indigenous seeds and native plant types are lost, which causes genetic degradation. Animals, insects, birds, and soil creatures lose their homes and food. Pesticides kill helpful insects like bees and butterflies, which hurts pollination and agricultural output (Adhikari et al. 1-17). Through which chemical pollution and toxicity increase by which people often use pesticides, herbicides, and insecticides to get rid of pests and weeds. These toxins kill not just dangerous bugs but also helpful creatures like birds, earthworms, and natural predators. Many pesticides stay in the soil and water for years, building up in the food chain. This causes bioaccumulation and biomagnification, which means that poisons build up at higher levels of the environment, harming both animals and people. It also changes climate and environmental imbalance which is greatly affected by industrial farming. Tractors, harvesters, and irrigation pumps use fossil fuels, which release carbon dioxide into the air. Nitrous oxide, a strong greenhouse gas, is generated by chemical fertilisers. Farming a lot of animals releases methane. Cutting down trees to make room for farms also makes it harder for trees to absorb carbon. These actions change the climate, which causes droughts, floods, and weather that is not always predictable, all of which hurt farming even more (Sannigrahi et al. 1-23). Then the depletion of natural resources where Industrial farming sees nature as something to be used up, not something to be safeguarded. Land is tired when you keep planting crops without giving them time to rest. Using too much water, minerals, and energy makes them less available for future generations. Forests and wetlands are cut down to make room for farms, which destroys ecosystems that control the cycles of water and temperature.

It spread resistant pests and weeds by using a lot of pesticides makes bugs and weeds resistant to them. Over time, pesticides make insects and weeds stronger. Farmers then employ harsher chemicals or larger dosages, which hurts the ecosystem even more. This makes a vicious loop of needing chemicals and destroying the environment (Aktar et al. 1-12). It shows the impact on animal life and ecosystems where Industrial farming hurts wildlife by destroying their homes and exposing them to chemicals. Poisoned water and soil kill birds, fish, frogs, and small animals. Factory raising animals generates a lot of waste that pollutes the land and water. This messes up ecosystems and makes natural food chains weaker (Yasir et al. 1-35). With these effects the long-term unsustainability can be observe through industrial farming which may give high yields in the near term, but it hurts the natural systems that sustain farming. Farming is harder and more expensive because of bad soil, dirty water, less biodiversity, and unstable weather. This puts the future of food security and the balance of ecosystems at risk. The ecological violence of industrial farming lies in its continuous exploitation of nature for immediate profit without considering long-term consequences. It destroys soil health, pollutes water, reduces biodiversity, accelerates climate change, and weakens ecosystems. Writers like Vandana Shiva argue that this form of agriculture represents a form of hidden violence against nature and humanity. To prevent further damage, there is an urgent need to shift toward sustainable, organic, and biodiversity-based farming systems that respect ecological limits and promote harmony between humans and nature.

### **SEEDS OF SUICIDE: FARMER DISTRESS**

The term "Seeds of Suicide" derives from investigative journalism and documentary reporting, especially the PBS Frontline/World program that connected the rise of Bt cotton, a genetically engineered cash crop, to more farmer hardship and suicide in some regions of

India. The word suggests that the seeds and the mechanisms that sprang up around them (finance, markets, agribusiness) created the circumstances for small farmers to go into debt, lose crops, and feel hopeless (Guillaume 316-337). The occurrence of farmer suicides is multifaceted and not just attributable to seeds: High prices for seeds, fertiliser, and insecticides, as well as debt from both formal and informal lenders, Drought or pests can cause crops to fail. Prices for crops that change and insufficient crop insurance, there are no other ways to make money, and there are problems with finance and agricultural markets. All these things together make the economy unstable and cause emotional suffering, especially for small and marginal farmers (Kannuri and Jadhav 558-575). When we talk about Economic and Structural Drivers, we mean things that place a lot of stress on farmers, such debt and credit pressure. For example, farmers commonly borrow money to pay for inputs. When their harvests fail, they become stuck in cycles of debt and sometimes turn to private moneylenders who charge exorbitant interest rates and use threats to get their money back. If you keep borrowing money, you might end up in financial trouble and hopelessness. Another is the expense of contemporary inputs. For example, the switch to cash crops like Bt cotton made farmers more reliant on pricey hybrid seeds and other bought inputs. Numerous studies contend that this increased risk is particularly significant in rain-fed or drought-prone regions. Then there's low and uncertain revenue. Even when yields are good, farmers typically don't obtain good prices because of intermediaries, weak marketplaces, and bad procurement, which makes farming unprofitable (Mukherjee 125). There are also other things to think about, such technological and policy factors. The debate over GM seeds and technology is a big part of this. Bt cotton was first launched in the early 2000s with the promise of lower pesticide use and increased yields. Critics say it raised input prices without giving many farmers, especially those without irrigation or good technical help, enough advantages to make up for it. Some people consider this change in technology as part of the "seeds of

suicide" story, but scholarly study is still trying to figure out what caused it. Then there were failures in policy and structure. Insufficient crop insurance, limited access to formal financing, inadequate rural infrastructure, and deficient extension services create misery. In addition, legislative initiatives have frequently not helped the farmers who need it most (Wanger et al. 1-42). One of the largest reasons is Environmental and Climate Trends and Climate Variability. Recent studies have shown that when there are not enough rains or when the weather is harsh, more farmers kill themselves. This shows that environmental risk is a major cause of agricultural distress today and in the future.

### **ALTERNATIVE VISION: SUSTAINABLE AGRICULTURE**

It is a way of thinking about the future that changes how food is made so that it is good for the environment, fair to people, and profitable in the long run. It extends beyond traditional farming to include methods and systems that are good for the environment, people, and food systems that can last. Sustainable agriculture is a way of farming that is meant to make enough food and fibre for today's requirements without making it harder for future generations to do the same (Velten et al. 7833-7865). Safeguard and restore natural resources such as soil, water, biodiversity, and ecosystems. Make sure that farmers make money and that communities get fair results. Encourage better food systems and social wellbeing. People generally say that it is a different way to do industrial, high-input farming. Instead of using a lot of pesticides, monocultures, and outside energy sources, it uses ecological processes and sustainable resource usage in food production. When we talk about the Core Principles of Sustainable Agriculture, we mean the basic ideas that govern decision-making and farm design that is Ecological Balance, which is working with natural processes instead than against them (Zhang 1-25). Make the soil healthier, cycle nutrients, and increase the number of different types of life. After all of this, Efficient Resource Use means using less water, energy, and non-renewable inputs, as well as using renewable energy and precise equipment

to cut down on waste. Economic viability means that farms need to be able to make money and stay in business even when the market and environment change. Adding new products and services can help farms make more money. Social Equity, on the other hand, supports farmers' livelihoods, the health of communities, and food sovereignty, and it encourages fair employment standards and local involvement in food systems.

## **MAJOR PRACTICES UNDER THIS ALTERNATIVE VISION**

Sustainable agriculture uses a lot of new and environmentally friendly ways. One of them is polyculture and crop rotation, which means growing different crops alongside or in a sequence.

This improves soil nutrients, naturally gets rid of pests, and boosts biodiversity. Then there are Integrated Crop-Livestock Systems, which combine growing plants and animals on the same farm. These systems may close nutrient cycles (for example, manure feeds crops) and cut down on waste. Agroforestry, on the other hand, is when trees are planted with crops and animals to enhance soil structure, hold more water, and increase biodiversity while also providing more income for the farm. Permaculture and wild farming systems are meant to copy natural ecosystems and encourage plants, animals, and the terrain to work together. Then, water conservation methods like drip irrigation, water harvesting, and drought-resistant agriculture help to safeguard water quality and consume less water. Integrated Pest Management (IPM) uses biological management, changing the environment, and resistant types to cut down on the need for synthetic pesticides. No-till or reduced tillage farming keeps organic matter in the soil, improves water retention, and minimises erosion (Muhie 1-11). Then, precision agriculture and technology tools like IoT sensors, drones, AI, and GPS help farmers use the right amount of water, fertiliser, and energy (Babar 1-41); (Chowdhury

et al. 1-19). Zero-Waste and Circular Systems cut down on waste by putting agricultural leftovers, animal waste, and by-products to good use.

### **WHY ALTERNATIVE VISION IS IMPORTANT?**

Sustainable agriculture solves some of the biggest problems that contemporary farming faces. For example, it helps the environment by keeping soil healthy, reducing erosion, protecting water bodies, and increasing biodiversity. Climate Change Mitigation: Agroforestry and perennial grains are two examples of strategies that can help agriculture capture more carbon and release less carbon. Human Health and Food Quality: Less usage of chemicals makes food safer and preserves the health of farmers and the community. Resilience to Climate Variability means that farms with healthy soils can better deal with droughts, floods, and other extreme weather events. Economic and social benefits include steady income, food security in the community, and chances to sell goods in the area (Shrestha and Horwitz 288-360). Perennial Grains is the first example of an Alternative Sustainable Model that grows in real-world or developing systems. It is a crop that grows year after year, improves soil health, and reduces tillage. Then, Managed Agroforestry Landscapes, which mix trees and crops to store carbon and get a variety of harvests. Also, Community Supported Agriculture (CSA) allows farmers and consumers a direct way to do business, which helps local economies.

### **PERSPECTIVE OF VANDANA SHIVA FROM *THE VIOLENCE OF THE GREEN REVOLUTION***

Vandana Shiva saw the Green Revolution as a developmental paradigm that engendered many types of covert violence against environment, farmers, and rural communities. Although it boosted food production via high-yield crops, artificial fertilisers, pesticides, and intense irrigation, she contends that it concurrently precipitated significant ecological degradation. In *The Violence of the Green Revolution*, (Shiva, *The Violence of Green Revolution* 1991) states

that “the Green Revolution has led to violence against nature, violence against farmers, and violence against society,” highlighting how monoculture farming reduced biodiversity and made agriculture vulnerable to pests and diseases. She elucidates that conventional mixedcropping systems were supplanted by homogeneous crop types, resulting in soil deterioration, water depletion, and chemical contamination. Excessive irrigation in areas such as Punjab has led to salinity and the depletion of groundwater, while a strong reliance on fertilisers has undermined long-term soil fertility. Thus, ecological balance was sacrificed for short-term productivity (Shiva, 1988). Shiva further argues that the Green Revolution generated economic violence by transforming farmers into dependent consumers of costly industrial inputs. In *Staying Alive*, she observes that farmers were converted “from producers into consumers of costly agricultural inputs” (Shiva, *The Violence of Green Revolution* 1991). The need to purchase hybrid seeds, fertilizers, pesticides, and machinery forced farmers to take loans, creating a cycle of indebtedness. When crops failed or market prices fell, many farmers were unable to repay debts, leading to financial insecurity and distress. Shiva connects this economic pressure to rising farmer suicides and rural poverty, arguing that high-input agriculture benefits corporations more than cultivators (Shiva, *The Violence of Green Revolution* 1991). She also criticizes corporate control over seeds, emphasizing in *Monocultures of the Mind* that “the control over seeds is the control over life itself” (Shiva, *Monocultures of the Mind* 1993), showing how farmers lost seed sovereignty and became dependent on multinational companies. Shiva emphasises the social and political ramifications of the Green Revolution, alongside its ecological and economic detriments. She contends that its advantages were predominantly restricted to affluent landowners and agribusinesses, while small farmers, women, and marginalised populations were marginalised. She asserted that small farmers unable to invest in new technologies were marginalised from agriculture and relegated to the status of landless workers (Shiva, *The*

*Violence of Green Revolution* 1991). Women's traditional roles in seed saving and farming were undermined, and their indigenous knowledge was marginalized by modern scientific practices (Shiva, *The Violence of Green Revolution* 1991). Shiva also links environmental degradation to political instability, especially in Punjab, where overexploitation of resources contributed to unemployment, frustration, and social unrest. She maintains that "ecological breakdown and social breakdown are closely linked" (Shiva, *The Violence of Green Revolution* 1991), suggesting that environmental mismanagement indirectly fuelled conflict and violence.

Furthermore, Shiva characterises the Green Revolution as a manifestation of epistemic and structural violence that marginalised indigenous knowledge systems while imposing Western scientific paradigms. In *Monocultures of the Mind*, she contends that prevailing science claims universality while undermining alternative epistemologies (Shiva, *Monocultures of the Mind* 1993). Conventional agricultural methods were deemed obsolete, while indigenous inventions were overlooked, resulting in intellectual reliance. For Shiva, this exemplifies a more extensive manifestation of structural violence, wherein growth transforms into a novel type of colonisation, influenced by official authority and corporate agendas rather than the need of farmers. The damage inflicted by the Green Revolution was not incidental but intrinsic to its fundamental framework. Shiva advocates for sustainable and ecological alternatives to industrial agriculture. She promotes organic agriculture, biodiversity preservation, seed sovereignty, and community-oriented farming as methods to re-establish equilibrium between humanity and environment. She emphasizes that true sustainability means "working with nature, not against it" (Shiva, *The Violence of Green Revolution* 1991). Her vision is to empower agriculturalists, safeguard ecosystems, and advance social equity. In summary, Vandana Shiva views the Green Revolution as a developmental paradigm that resulted in ecological degradation, economic reliance, social disparity, political turmoil, and

intellectual subjugation. Her analytical essays reveal how productivity-focused agriculture conceals profound human and environmental distress, advocating for a transition to ethical, sustainable, and farmer-centric agricultural systems.

## CONCLUSION

The path from the Green Revolution to the tragedy of farmer suicides shows how deeply flawed India's industrial agriculture is. The Green Revolution promised food security and economic prosperity at first, but its reliance on high-yield crops, chemical inputs, and heavy irrigation led to ecological imbalance, economic dependency, and social inequity over time.

Vandana

Shiva wrote in *The Violence of the Green Revolution* that this way of developing caused "violence" against environment, farmers, and society by ruining soil and water supplies, lowering biodiversity, and pushing small farmers to the edges. As input costs rose and market prices became less predictable, farmers became stuck in cycles of debt. This caused a lot of agricultural hardship and, in many cases, suicide. The state of industrial farming has made this situation even worse by putting profit, production, and corporate control ahead of ecological sustainability and human well-being. *Staying Alive* shows how modern farming turned independent farmers into dependent consumers, which hurt local knowledge systems and community resilience. Farmers' freedom and dignity have been hurt by losing seed sovereignty, the rise of corporations, and the neglect of traditional customs. As a result, farming has gone from being a way to make a living and a part of one's culture to a dangerous and unpredictable job that causes stress and uncertainty. In conclusion, the shift from the Green Revolution to seed-related debt and farmer suicides indicates not only individual failure but a systemic catastrophe originating from industrial agricultural methods. The current state of agriculture shows that development focused on production without taking

care of the environment and people is not sustainable in the long run. To help farmers who are in trouble, we need to make a big change toward sustainable agriculture, biodiversity-based farming, and policies that put farmers first and restore environmental balance, economic security, and social justice. Agriculture can only become a way of life and dignity instead of a route to despair if we redefine progress in moral and ecological terms.

### Works Cited

- Adhikari, Subodh, et al. "Impacts of Agricultural Management Systems on Biodiversity and Ecosystem Services in Highly Simplified Dryland Landscapes." *Sustainability*, vol. 11, no. 3223, 2019, pp. 1–17, <https://doi.org/https://doi.org/10.3390/su11113223>.
- Adkoli, Bharati N. "Environmental Literature and Ecocriticism - A Study." *Shanlax International Journal of English OPEN*, vol. 12, no. 3, 2024, pp. 32–36, <https://doi.org/https://doi.org/10.34293/english.v12i3.7705>.
- Adoración Barros-Rodríguez, Rangseekeaw, Pharada, et al. "Impacts of Agriculture on the Environment and Soil Microbial Biodiversity." *Plants*, vol. 10, 2021, pp. 1–10, <https://doi.org/https://doi.org/10.3390/plants10112325>.
- Aktar, Wasim, et al. "Impact of Pesticides Use in Agriculture : Their Benefits and Hazards." *Interdisciplinary Toxicology*, vol. 2, no. 1, 2009, pp. 1–12, <https://doi.org/10.2478/v10102-009-0001-7>.
- Babar, Adil Z. *Sustainable and Precision Agriculture with the Internet of Everything (IoE)*. 2025, pp. 1–41.
- Chowdhury, Hribhu, et al. *Artificial Intelligence in Sustainable Vertical Farming*. 2023, pp. 1–19.

- Guillaume, Gruère ;, Debdatta Sengupta. “Bt Cotton and Farmer Suicides in India: An Evidence-Based Assessment.” *National Library of Medicine*, vol. 47, no. 2, 2011, pp. 316–37, <https://doi.org/10.1080/00220388.2010.492863>.
- Hans, V. Basil, et al. “Revisiting the Green Revolution in India : Assessing Achievements , Challenges , and Future Prospects.” *Acta Scientific AGRICULTURE*, vol. 8, no. 8, 2024, pp. 13–19, <https://doi.org/10.31080/ASAG.2024.08.1390>.
- Kannuri, Nanda Kishore, and Sushrut Jadhav. “Cultivating Distress : Cotton , Caste and Farmer Suicides in India.” *Anthropology & Medicine*, vol. 28, no. 4, 2021, pp. 558–75, <https://doi.org/10.1080/13648470.2021.1993630>.
- Meeran, J. Ahamed. “Ecocriticism in Literature : Examining Nature in Contemporary Fiction.” *International Journal of Integrated Research and Practice (IJIRP) IJIRP*., no. 3, 2025, pp. 9–15.
- Muhie, Seid Hussen. “Novel Approaches and Practices to Sustainable Agriculture.” *Journal of Agriculture and Food Research*, vol. 10, no. November, 2022, p. 100446, <https://doi.org/10.1016/j.jafr.2022.100446>.
- Mukherjee, Sanchita. “Examining Farmer Suicides in India : A Study of Literature.” *Munich Personal RePEc Archive*, no. 35675, 2012, pp. 1–25, <https://mpa.ub.unimuenchen.de/35675/>.
- Raeboline, Ann, et al. “The Impact of the Green Revolution on Indigenous Crops of India.” *Journal of Ethnic Foods*, vol. 9, 2019, pp. 1–10.
- Sannigrahi, Srikanta, et al. *Effects of Green Revolution Led Agricultural Expansion on Net Ecosystem Service Values in India*. 2020, pp. 1–23, <https://doi.org/https://doi.org/10.1016/j.jenvman.2020.111381>.

Shahin, Abdur Rahman; Nelay, Nowshad Hasan. "Popularizing Ecocriticism : A Study on Environmental Awareness among English Discipline Students at Khulna University." *Journal of Environmental and Science Education*, vol. 5, no. 2, 2025, pp. 110–21, <https://doi.org/10.15294/jese.v5i2.30654>.

Shiva, Vandana. *Monocultures of the Mind: Perspectives on Biodiversity and Biotechnology*. Illustrate, Palgrave Macmillan, 1993.

---. *The Violence of the Green Revolution: Third World Agriculture, Ecology and Politics*. Illustrate, Zed Books, 1991.

Shrestha, Anil, and David Horwitz. "Variations and Commonalities of Farming Systems Based on Ecological Principles." *Sustainability*, vol. 4, 2024, pp. 288–307, <https://doi.org/https://doi.org/10.3390/crops4030021>.

Velten, Sarah, et al. "What Is Sustainable Agriculture ? A Systematic Review." *Sustainability*, vol. 7, 2015, pp. 7833–65, <https://doi.org/10.3390/su7067833>.

Wajid, Qhudsia. "Ecocriticism : Associating Literature and Ecology to Raise Environmental Consciousness." *Manar Elsharq Journal for Literature and Language Studies (MEJLLS)*, vol. 3, no. 3, 2025, pp. 50–57, <http://meijournals.com/ara/index.php/mejlls/index%0Aecocriticism>:

Wanger, Thomas Cherico, et al. *Decades Matter: Agricultural Diversification Increases Financial Profitability, Biodiversity, and Ecosystem Services over Time*. pp. 1–42, <https://doi.org/https://doi.org/10.48550/arXiv.2403.05599>.

Yasir, Muhammad, et al. "Pesticide Degradation : Impacts on Soil Fertility and Nutrient Cycling." *Environments*, vol. 12, no. 272, 2025, pp. 1–35, <https://doi.org/https://doi.org/10.3390/environments12080272>.

Zhang, Qian Forrest. "From Sustainable Agriculture to Sustainable Agrifood Systems : A Comparative Review of Alternative Models From Sustainable Agriculture to Sustainable Agrifood Systems : A Comparative Review of Alternative Models." *Sustainability*, vol. 16, no. 9675, 2024, pp. 1–24, <https://doi.org/https://doi.org/10.3390/su16229675>.