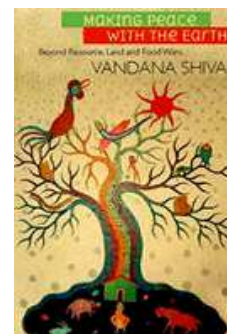


Review

Making Peace with the Earth: beyond resource, land and food wars.

By Vandana Shiva (Women Unlimited, 2012, ISBN 10: 8188965758/
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‘**W**hen we think of wars in our times, our minds automatically turn to Iraq and Afghanistan, but the bigger war is the on-going war against the earth’. Thus begins Vandana Shiva’s alarming exposé of what she believes is an all-out capitalistic assault on Mother Earth. Here, ‘[t]he global corporate economy based on the idea of limitless growth’ is presented as ‘a permanent war economy against the planet and people’—comprising a combination of ‘land-grab,’ ‘water wars,’ ‘climate wars,’ ‘forest wars,’ and ‘seed wars.’ The ‘means’ of this economy, Shiva avers, themselves constitute ‘instruments of war’—such as ‘coercive free trade treaties...and technologies of production based on violence and control, such as toxins, genetic engineering, geo-engineering and nano-technologies’. Arguing that these instruments ‘kill millions in peace-time by robbing’ people

‘of food and water,’ she also locates their tenuous obverse in the use of fertilizers ‘in the July-2011 Oslo bombing to Mumbai serial blasts to Afghanistan’ (p. 3).

And so, Shiva either brings to light or establishes a web of underlying interconnections among the economic, the political, the ethical, the technological, and the ecological. The narrative that thus unfolds is not normally a reader’s delight: It is incoherent, unbalanced, repetitive, and, intermittently vague; it also does not have an obvious potential to keep the attention of those already at the forefront of environmental activism or acquainted with Shiva’s oeuvre. And, yet, one frequently runs into big-picture gems like this:

Not only is corporate power converging with state power for the great resource grab, corporate-state power is emerging as militarised power to undemocratically impose an unsustainable and unjust agenda on the earth and its people. That is how

the war against the earth becomes a war against people, against democracy and against freedom. (p. 5)

The studiously thoughtful as well as the young and the curious are therefore likely to find the book informative and diabolically philosophical. They will, however, have to overlook Shiva's occasional reliance on identity politics—and usage of flawed, colonial labels such as 'tribal'—through her defence of India's small farmers and forest dwellers.

It will also help to remember that Dr. Shiva is a busy global activist and organic farmer – not an academic, nor a journalist (even though a prolific author and a field researcher). Much of what she writes is based upon her first-person observations of key events and interactions with other influential activists, politicians, scientists, and businesspeople as well as small-scale producers. She does not have the luxury of leisurely, systematic writing.

A focus on India's 'eco-apartheid'

Shiva's story is told mostly from the context of India—because India is her 'home and...ground of...experience', and also 'because it is seen as the poster child of the success of economic globalisation'. Of course, her aim is to reveal

how the growth miracle is based on a kind of war, how it has deepened inequalities and eroded democracy;

how it is destroying the rich biodiversity and cultural diversity...through...the imposition of monocultures; how millions lose their livelihoods so that a handful of global corporations and billionaires can control markets and resources. (p. 7)

So, she criticizes how India has armed some 'tribals' to fight the rest of their own, ostensibly to rid the latter from 'the "disease of Naxalism".' Given that the main opposition party and the ruling coalition are 'unified in their commitment to alienate tribals from their resources' the result is a condition that she calls 'eco-apartheid' (p. 28). But she also aims to highlight the alternatives that the people have continued to exercise against all the odds – and thus to undercut the neoliberal assumption 'that there is no alternative'. The story of these alternatives, Shiva suggests, is 'the story of making peace with the earth' (p. 8).

The focus on land and participatory land usage

Without demonstrating their linkages systematically, Shiva argues that 'a global economy, driven by speculative finance and unbridled consumerism' has led to a new wave of land commodification, first set in motion during the European colonization of the globe (p. 30). In India, she points to the colonial Land Acquisition Act of 1894 as the source of this

commodification - with the new wave having been unleashed via the 1991 Structural Adjustment Programmes (SAPs). The SAPs would fold back India's post-Independence land-reform initiatives and open up the mining and infrastructural sector to privatization (p. 31).

Reporting irregularities and illegalities committed by the state to commodify land (including its violence against the protesters), Shiva provides critical profiles of key Indian industrial projects or houses for which land had been (or is still being) coercively acquired. Those businesses include the following: Jai Prakash Associates—for Yamuna Expressway (p. 31); French company Areva S.A. and the Nuclear Power Corporation of India (for Jaitapur Nuclear Plant) (pp. 70-73); the South-Korean POSCO Steel Project in Orissa (pp. 48-57); Special Economic Zones in many parts of India, including Nandigram (pp. 33-34, pp. 59-64); Tata's Gopalpur Steel Project (pp. 40-43); and Vedanta Resources (esp. in Niyamgiri) (pp. 64-70).

On a related note, she lambasts the infamous Operation Green Hunt. Furthermore, as a way for India to get out of the land-related violence, she reproduces a vague blueprint that had been proposed in 2010 by a so-called Independent Peoples' Tribunal on Land

Acquisition, Resource Grab and Operation Green Hunt. This blueprint advocates the participation of — and not merely a representation by — those whose land the government wishes to acquire; it also advocates tolerance of dissent (pp. 77-80).

The focus on water and 'water democracy'

Shiva attacks the multinational corporate thrust to privatize water (ostensibly to solve the global water crisis). She also cites the World Bank for contributing to India's water crisis 'by financing dams and diversion of river waters' throughout the 1950s-1960s, and for using that crisis 'to force Indian states and public utilities to privatise water services and assets' through the 1990s (p. 83). She specifically targets the Banks' use of 'its loans as a conditionality for privatization', for diverting water from villages to cities and from the poor farmers to rich industrialists, and for forcing governments to increase water tariffs (pp. 83, 84).

Drawing a sketch of how this process has unfolded—and has been resisted—in various parts of India throughout the 2000s, she claims that the World Bank projects (such as Delhi's Sonia Vihar plant and Tamil Nadu's Veeranam) have failed to provide water to the people; instead, they have enriched corporations like Suez,

Vivendi, and Bechtel (p. 84; p. 88, p. 89). Providing details of Delhi's notorious water crisis, she faults the Chief Minister, Sheila Dikshit, for relying on the Planning Commission rather than on the state's elected representatives for finding a solution (p. 84, p. 85). She also contradicts the standpoint of Montek Singh Ahluwalia, the Deputy Chairman of the Planning Commission, that 'free water' benefits 'rich farmers', arguing instead, that 'only the rich...can afford to pay' for commodified water (p. 85).

Broadly, however, Shiva places the blame for India's water shortage on the wastage of water caused by 'chemical industrial farming mistakenly referred to as the Green Revolution' (p. 86). Her solution is to replace the World Bank's attempts to enforce its loan-based 'water dictatorship' with 'water democracy', whereby 'water is managed as a public good, with strong public utilities and vital public participation' (p. 86). This solution is consistent with her observation that the talk of 'transparency' in India is merely a result of the public resistance: The real issue is the ownership and management of water (p. 86).

On the hopeful side, she provides a chronological profile of how the World Bank was made to exit Delhi's water crisis in 2005 (which it had entered in 1998)

owing to people's resistance (which was organized into the Citizens' Front for Water Democracy in 2003) (pp. 86-87). Outside India, she highlights the successful resistance to water privatization by Italy's citizens via the *Forum Italiano del Movimenti per l'Acqua* (p. 91).

The focus on climate and 'earth democracy'

Regarding the hot-button issue of climate, Shiva reports how the 2009 United Nations Climate Change Conference was reduced to 'a non-binding Copenhagen Accord, initially signed by five countries, the US and the Basic Four [Brazil, South Africa, India, China], and then supported by twenty-six others, with the rest of the 192 UN member states left out of the process' (p. 99). 'Most countries,' Shiva points out, learnt about the "'accord'" from President Obama's announcement about it 'to the US press corps' (p. 99).

As for the content of the Copenhagen Accord, she believes that it is based upon the following four false assumptions: that Gross National Product 'measures quality of life'; an 'increased use of fossil fuel' reflects an improved quality; growth and fossil fuel are limitless; and that polluters 'have no responsibility, only rights' (p. 101). She counteracts the above assumptions by stating that growth in

India's Gross National Product has paralleled that of its hunger, renewable energy provides an alternative to fossil fuels, the 2008 financial crisis showed the limits to growth and to availability of fossil fuels, and that carbon credits 'do not force the polluters to pay for their deeds but allow them to continue to pollute' (pp. 101, 102).

What she proposes as an alternative is 'Earth Democracy based on principles of justice and sustainability', realizable via citizens' becoming 'the change' they 'want to see' and by forcing their governments and corporations 'to obey the laws of the earth and make climate peace' (p. 102). A singular step in that direction would be to effect '40 per cent reduction in emissions...through biodiverse organic farming which sequesters carbon while enriching our soils and our diets' (p. 103).

The focus on forest—and how to make peace with it

Against the backdrop of the increasingly frequent human-animal conflict in those areas of India where the forests are depleting, Shiva laments the emergence of a scenario that precludes the possibility of 'coexistence' of different forms and species of life (p. 111). Regretting the clashes between the conservationists and forest-dwellers, she hopes that they will instead

join hands and train their attention 'on their common adversary': 'mining corporations, poachers, timbers and land mafias' (p. 111).

Criticizing the World Bank's Tropical Forest Action Plan for promoting forests' commercialization as a way to save them, she states the following:

The myth that 'experts' from Washington and global corporations and investors are needed for saving tropical forests is a renewal of an old myth—the British would 'conserve' India's forests when they had, in fact depleted them at home and in the colonies. (p. 116)

She also points out that the British interest in India's forests had first started in the early 19th-century with the need to address 'the growing deficiency of oak in England' and its impact on the King's Navy. The East India Company was thus given 'royalty right in teak trees'—which had previously been with 'the royal courts' of the southern kingdoms of India (p. 116).

In the forestry projects promoted by the World Bank in India she detects a continuation of this colonial scientific forestry. She highlights that over '90 per cent of tree planting under social forestry' devised by the World Bank has been of eucalyptus, nearly all of it on fertile agricultural land, and 'all of it has been marketed to urban industrial centres,

especially to pulp industry'. This has led to food, fuel, fodder, and natural-fertilizer shortages and reduced 'agricultural employment' (p. 118).

Likewise, the World Bank-financed watershed projects in the northern hills are 'a prescription for introducing commercial activities in the watershed area'—and these projects' 'success...is generally measured only in terms of increased cash flow' (p. 120). The Bank's commercial priorities are apparent in the fact that its 'investment profiles for the Tropical Forest Action Plan' earmarked \$32 million 'for ecosystem conservation'—but \$500 million for 'Fuelwood and Agro-Forestry,' \$500 million for 'Land-use on Upland Watersheds,' and \$190 million for 'Forest Management for Industrial Uses' (p. 121). Highlighting similar strategies adopted by the World Bank in Brazil, Shiva avers that 'these projects fail to meet ecological criteria' because they comprise 'large-scale, capital-intensive planting of commercial species like pine and eucalyptus' that destroy both local ecologies and economies (p. 121).

Shiva also criticizes 'the UN Programme on Reducing Emissions from Deforestation and Degradation' for its reliance on 'market/financial incentives...to reduce emissions from deforestation' and its 'conversion of natural

forests into biofuel plantations' (p. 123). Behind this move, she sees the workings of 'agribusiness, biofuels and landgrab' rather than a response to 'local' needs (p. 124). She blames a significant percentage of the rise in global food prices since 2008 on the diversion of cereals and land for biofuels (pp. 163-165).

As an alternative framework, she gives the example of the Chipko Movement, which neither separated 'forest resources' from other eco-systemic resources nor reduced 'the economic value of a forest...to the commercial value of timber' (p. 117). And, yet, instead of totally rejecting 'market valuation' of nature, Shiva gives it a negative functionality: 'At best, putting a market valuation on particular ecosystem services can act as a heuristic guide to avoid destruction' (pp. 124-125). She recommends 'biodiverse ecological farming' as a 'lower emission' technology (p. 124)—expressing her broader positive programme as follows:

Making peace with the forest involves recognising the integrity, diversity and unity of the forest—it cannot be reduced to the timber or pulp it provides, or to the carbon it absorbs. (p. 125)

The focus on food and 'food peace'

The second part of the book focuses on the 'food' dimension of the humanity's

worsening relationship with the Earth— suggesting that the ‘food crises’ need to be addressed through ‘food justice’, to allow all to secure ‘food peace’. Underlying this attempt is Shiva's view that 'hunger' and 'scarcity' were built into 'the design of the green revolution' (p. 129). While the first green revolution was about monetarizing, industrializing, and commercializing agriculture; the second one is about letting 'corporations...claim...patents on seeds' via 'genetic engineering;' and the third— emergent—one involves 'synthetic biology' (pp. 129, 141).

On a different level, the ‘first green revolution spread monocultures of rice, wheat and corn’; and the second one ‘of corn, soya, canola and cotton’; while the third one ‘will spread monocultures of biofuels’. This should have been expected given that the World Trade Organization's (WTO's) Trade Related Intellectual Property Rights (TRIPS) agreement had been 'written by corporations like Monsanto' and that the 'Agreement on Agriculture (AoA) of the WTO was drafted by the MNC Cargill' (p. 129).

In this context, Shiva laments India's departure from its first agriculture minister K. M. Munshi's strategy to rejuvenate 'the ecological base' of the country's agriculture (destroyed through colonial-British management). The departure to

commercial agriculture broke the following links in the food chain: soil, water, and seed; small peasants; women; and 'right to food' (p. 133).

(a) Globalized corporate retail (or the Walmart Model)

In addition to the breakage in the above linkages, 'globalised retail' and fast-food chains have been adding to hunger not only in India but also globally (p. 130). Globalized corporate retail is forcing food to travel long distances, reducing its nutritional value and increasing environmental costs owed to packaging and transportation. Moreover, 'Hypermarkets displace diversity, quality and taste and replace it with uniformity, quantity and appearance' (p. 217).

Shiva rejects the claims that this system gets rid of middlemen, generates employment, or saves money and time (pp. 211-213). Instead, she views corporations such as Walmart and Reliance as, 'giant middlemen' out to render a large number of small producers and traders unemployed, hungry, and literally suicidal (p. 211). Here, she counters Thomas Friedman's admiration for the so-called Walmart Model as follows:

This model appears efficient if one ignores limits and...the need for livelihoods and the right to work. India's retail is based on local supply

from producers to small retailers. Vegetables grown in small holdings around cities are carried in headloads and then distributed by hawkers and vendors in every village, town and street...[T]his involves millions of humans in creating economic activity...[and]...it avoids carbon dioxide emissions...Walmart's entry into India threatens this ecologically sustainable and socially just model of retail. Food miles will increase, and with it CO₂ emissions...Ecologically and socially, the Walmart model of retail is highly inefficient. (p. 214)

In accordance, she opposes Walmart's entry into India as well as Indian government's incremental opening up of the retail sector for foreign direct investment.

Illustrating how similar moves at global corporatization of the food sector have been disastrous around the world—including the United States, Chile, Kenya, and Mexico—she resents the 'retail dictatorship' that is being imposed upon India, 'a land of retail democracy' populated by millions of small shops (p. 210). To this imposition, there is the class dimension:

The pull towards Walmart's mega stores will come by promoting shopping in super stores as fashionable among the middle classes. The push towards Walmart and giant retail chains will be made by legally banning street vendors and local retail, as is being done in city after city in India in the name of 'cleaning it up'. (p. 215)

Intertwined with that class dimension is the cultural dimension:

A well-crafted cultural assault, in which language and semantics play an important role, is being mounted to project India's retail democracy as inferior, and Walmart or Reliance monopolies as culturally superior. Thus the self-organised sector of retail democracy is now defined as "unorganized," and the corporate monopoly sector is defined as "organized." The subtle implication is to project the transition from retail democracy to retail dictatorship as a transition from an unorganized to an organized state. (pp. 210-211)

The way out of this creeping retail dictatorship would be to revisit the conventional economic model of productivity with an ecological one, which takes into account 'resource utilization' and biodiversity. Moreover, 'a universal' public-distribution system '*ensuring fair prices throughout the food chain*' needs to be embraced—instead of 'introducing cash transfers' that would rely on global corporations for food distribution (p. 134, original italics). (Shiva can now take heart in the fact that India has adopted the framework that she prefers.)

(b) *The biotech industry*

Shiva rejects a set of arguments that the biotech industry has proffered to promote genetically modified seeds. First, she sees no need for genetically engineered seeds,

given that natural seeds, crop combinations, and organic solutions are already in place to address the problems—such as draught conditions, pests, or weeds—that are supposed to be addressed by genetically engineered seeds. She gives many examples to support her case.

Second, she rejects the idea that a genetically engineered agricultural organism is "substantially equivalent" to conventional organisms and foods. A 'GE crop or food' differs from its conventional counterpart 'because it has genes from unrelated organisms'. Its supposed 'substantive equivalence' to its conventional counterparts is also given up by 'the biotechnology industry itself...when it claims patents on GMOs on grounds of novelty' (p. 181).

Third, she refutes the claim that the 'new risk is insignificant' because 'we are surrounded by bacteria' and 'the problem of antibiotic resistance already exists'. In this regard, she questions the biotech industry's 'extrapolation of data from artificially contracted contexts to real ecosystems' and cites the Union of Concerned Scientists' criticism of the United States Department of Agriculture's field trials for their poor design and execution (p. 183).

An important point she highlights about such trials is this: 'Many test crops

are routinely isolated from wild relatives, a situation that guarantees no out-crossing' (p. 184).

Fourth, she rejects the claim that genetically modified organisms and conventional crops could coexist, pointing out—via numerous global examples of 'environmental contamination'—that 'cross-pollination...is unavoidable' (p. 186, p. 187).

Shiva also debunks the benefits of genetically engineered seeds typically touted by the biotech industry, pointing out that this brand of agriculture has enhanced 'the use of pesticides and herbicides' by generating 'super pests and super weeds' (p. 148). Based upon the results of field studies conducted by different organizations, she also claims that transgenic crops do not fare well under stress conditions. Furthermore, multinational experiments on mice as well as results from medical observation of pregnant women via a Canadian study lead her to conclude that concerns relating to 'toxicity and allergenicity' for humans remain (p. 189).¹ Highlighting the United States' efforts 'to kill the Biosafety

¹ Regarding the latter, she refers to the following article: A. Aris and S. Leblanc, "Maternal and Fetal Exposure to Pesticides Associated to Genetically Modified Foods in Eastern Township of Quebec," *Reproductive Toxicology*, May 31, 2011 (4) 526-33, Epub 2011 Feb/8.

Protocol in the Convention on Biological Diversity,' she deems the American opposition to the European labelling of genetically modified foods as 'one dimension of the totalitarian structures associated with the introduction of genetic engineering in food and agriculture' (p. 183, p. 188).

(c) Industrial agriculture

However, what Shiva rejects is not just bioengineered food, but industrial agriculture itself:

Industrial agriculture contributes to climate change through the direct use of fossil fuels and the emission of CO₂ as well as through the use of fossil-fuel based nitrogen fertilisers which emit nitrogen oxide, which is 300 times more damaging to the climate than CO₂. Organic farming or organic soils contribute to mitigation of climate change (a) getting rid of agri-chemicals like synthetic fertilisers; (b) sequestering carbon in the soil. (p. 151)

She backs up the above claims with the results of studies in the US, UK, India and elsewhere (pp. 151-153), drawing the following grand conclusion:

The solutions for the climate crisis, the food crisis, or the water crisis are the same: biodiversity-based organic farming systems. ... First, production is based on water-prudent crops; second, they use one-tenth the water that chemical systems do; third, the increase in organic matter content transforms the soil into a water

reservoir, which reduces irrigation demand and helps conserve water in agriculture. Maximising biodiversity and organic matter production thus simultaneously increases climate resilience, food security and water security. (p. 154)

She argues that 'biodiverse small farms produce more agricultural output per unit area than larger farms'—including in the US—and one must 'switch from measuring monoculture yields to assessing biodiversity outputs in farming systems' (p. 230). To support her case, she points to a United-Nations report (December 2010) submitted by Olivier de Schutter, the Special Rapporteur on the Right to Food, and to a joint study by United Nations Conference on Trade and Development and United Nations Environment Programme (2008).

Conclusion: Reject the growth model, embrace 'enoughness'

Echoing the thinker Ashis Nandy, Shiva rejects 'the growth model' of economy (and its dependence on abstract statistical instruments). She blames it for the 2008 financial crisis highlighting the following: 'The total US economy is \$14 trillion in terms of GDP—\$9 trillion was debt obligation in seven of the largest financial institutions' (p. 233).² She also paints

² Her source is as follows:
www.treasurydirect.gov/govt/reports

India's post-1990s privatization drive as an unmitigated disaster that made the poor poorer even as the 'incomes of the top one per cent increased by about 50 per cent; of this one per cent the richest one per cent increased [their] incomes more than three times' (p. 237). For this drive, she blames the World Bank and the International Monetary Fund. As for the 'balance of payment crisis' that had put those agencies in a position to coerce India, she states the following:

First India was indebted by borrowing for the green revolution in 1965-66, then the debt thus created imposed structural adjustment as the "reforms" of 1991 combined with the imposition of WTO rules in 1995. (pp. 261-262)

She also provides summary accounts of how Indian firms or corporate houses – such as Arcelor Mittal, Reliance, Essar Group, Jindal Steel & Power, Adani Group, Bharti Airtel, Tata, and Vedanta – got richer since the onset of India's economic liberalization. She highlights the violence that the state unleashed on their behalfs against various communities unwilling to part with their land, water, or livelihood (pp. 238-255).

Shiva then wonders whether the wealth 'is...being created or has it merely been redistributed from the weaker to the more powerful?' (p. 254) Her own viewpoint in that regard becomes clear as

she accuses the firms of being anti-national:

During 2010-11, Shashi Ruia of Essar invested \$1.2 billion abroad and \$200 million in India; Mukesh Ambani's domestic investments were \$2.7 billion while investments abroad were \$8 billion; Ratan Tata invested \$200 million in India and \$3 billion abroad; Anil Ambani invested \$400 million in India \$3 billion abroad; Sunil Mittal invested \$2 billion in India and \$16 billion abroad. (p. 255)

She concludes by proposing "'enoughness'" as the basis of her 'earth democracy', whose principles include the following: '[r]especting the integrity of the earth's ecosystem and ecological process'; recovering 'the commons'; '[i]nternalising ecological costs', and 'creating "living" economies...democracies...[and]...cultures' (p. 264 & p. 265). To that end, she cites the Ecuadorian victory (under its 'rights of nature' Constitutional clause) against British Petroleum and the Bolivian President Juan Evo Morales Ayama's push 'for adopting a Universal Declaration of the Rights of Mother Earth' as important steps (p. 264).

In the Ecuadorian case, Shiva herself was the lead plaintiff.³ 📄

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³ See www.rainforest-rescue.org/news/3237/plaintiffs-to-bp-for-nature-s-rights-in-ecuador-s-constitutional-court