<u>Soil not Oil</u> <u>by Vandana Shiya (2008)</u>

Summary of discussion at a HiCAN book group meeting, 4th June 2015,

by Ian Henghes, Catherine Budgett-Meakin, Sydney Charles, Jill Boswell, & Robyn Thomas, with contributions from Jonathan Boswell & Adrian Thomas, and comments from Jane Howard by email

The author: Vandana Shiva (born 1952), controversial Indian environmentalist, originally nuclear physicist (PhD in quantum theory, Canada).

Moved to biological sciences & took part in Chipko ("Tree Huggers") Movement to save Indian forests, 1970s

1980s: started Navdanya, movement for biodiversity, local seed banks, organic farming & fair trade: now over 70,000 farmers.

2004: founded international college for sustainable living, in collaboration with Schumacher College UK.

Challenged patenting of neem, basmati rice, & native wheat; opposed golden rice. "Environmental Hero" (Time magazine), but disliked by others, eg Forbes magazine who claim use of new crops such as Bt cotton has increased farmer prosperity.

Introduction: Triple Crisis, Triple Opportunity

- * We have a triple crisis, ie climate change, peak oil, and food insecurity, all of which impact especially on the poor. Current "productivity" is only a measure of how few people it takes to produce something, is market centred, and increases inequality.
- * Instead, we must choose to make a nature- and people-centred transition to a fossil free future, where the economy is rooted in a fertile soil; power down energy & resource consumption and power up collective democratic energy. In crisis there is opportunity!

Ch 1: Politics of Change - Eco-Imperialism vs Earth Democracy

- * Present "solutions" to climate change are "imperialistic', imposed by West, eg World Bank suggestion (1991) that dirty industries should be exported to LDCs; carbon trading merely "privatizes the commons"; development aid interventions "destroy resources, deplete energy and pollute the atmosphere"; Stern review only focuses on benefits to big business.
- * Instead, we should work within the laws of ecological sustainability and social justice (Earth Democracy/ Gaia), ie break free from "global supermarkets", live lightly, defend small farmers and indigenous communities, give everyone the right to ecological space.

India can lead the world in this because it is primarily an agrarian economy.

Ch 2: Sacred Cow or Sacred Car

- * Livelihood of poor symbolized by cow inviolable under Article 21 of India's constitution; ficus tree also protected for shade.
- * This has all changed: from 2000, foreign direct investment allowed, so more manufacturing, esp in cars & highways; 2004, BJP govt promoted cheap cars for middle classes.
- * This has resulted in: worse health (vehicle pollution, lead poisoning), accidents, people displaced (for factories, highways, mines), less food (land diverted to biofuels), deforestation, fewer cows (and therefore fewer milk products, less organic manure, less urine pest control), neglect of public transport (esp rail), rise in CO2 due to use of fossil fuels.
- * This use of resources is unsustainable, in contrast to the benefits the cow brings transport, energy, food & fertilizers. Note that 6.3 times more energy is needed to cultivate soybeans with tractors than with draft animals.

Ch 3: Food for Cars or People - Biofuels a False Solution to Climate Change and a Threat to Food Security

- * Traditional biofuel (from wood, vegetable waste) used for cooking & heating, decentralized, sustainable.
- * Contrast industrial biofuels based on monoculture (esp jatropha, an inedible plant), destroys biodiversity, has centralized ownership (esp agribusinesses such as Monsanto, Cargill), takes away pastureland of poor, profits go to cities, big subsidies for producers, rise in food prices.
- * Industrial biofuel can also increase CO2 emissions (deforestation releases CO2, 1.5gal of gasoline needed to produce 1gal ethanol), and demands much more water (1,700gal to produce 1gal ethanol).
- * Concern recently in India that food crops should get priority, but opposition says jatropha grows on wasteland that can't be used for food.

Ch 4: Soil not Oil - Securing our Food in Times of Climate Crisis

- * 1995, World Trade Org imposed free trade/free market rules, which led to big agribusinesses importing GM seed, chemical fertilizers, dumping products (eg soy, Cargill), so that undercut local production (India no longer self sufficient in wheat).
- * Has also led to growing dependence on oil, world prices, increased need for water, polluted run-offs, & seeds now have to be paid for. Now there are rising CO2 emissions, unsustainable monocultures, infertile soils, bankrupt farmers but good corporate profits.
- * Contrast effects of sustainable "living soil": biodiversity of varieties of crops (saline/drought/flood resistant varieties), fertile soil (x12 more crops per acre), fewer food miles (therefore fewer CO2 emissions), seeds held in common (no patents), farmers not bankrupt.

Note: Albert Howard, early 20th century agricultural adviser in India, one of founders of Soil Association, said he learned more from traditional Indian agricultural methods than he taught.

Conclusion: Unleashing Shakti: Our Power to Transform

- * Present growth (9% in India) is a "devouring energy", destructive, resulting in farmers pushed off land, expensive food & depleted soil.
- * Contrast Shakti, (= "living energy", Gaia) which is renewable and sustainable, using both human and nature's energy, giving equal rights of all to ecological space.

Discussion:

- * Agree that this is a powerful book, direct and clear, even though there is sometimes a propensity to hector, enumerate, and repeat certain words eg "paradigm".
- * Very useful to listen to a voice from such a different, emerging country, one which we in the west seldom hear.
- * Her arguments are compelling, but what chance do they have against the power of the capitalist giants?
- * It would be helpful if she gave more practical details of how the transformations can take place, considering also the rigidity of the caste system in many areas and other forms of traditional organization of society eg zamindars. How could city dwellers be organized to help?
- * Some modern technological advances, such as mobile phones and the internet, have surely been helpful for local community organisations?

Conclusion: inspirational arguments which need to be heard more widely, despite the frustrations.