The Toxic Agriculture of Monsanto and Big

Agribusiness vs. Agroecology Rooted in Local

Communities

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"We are being far too kind to industrialised agriculture. The private sector has endorsed it, but it has failed to feed the world, it has contributed to major environmental contamination and misuse of natural resources. It's time we switched more attention, public funds and policy measures to agroecology, to replace the old model as soon as possible." – <u>Dr David Fig</u>, Biowatch, South Africa

Based on the results on his farm in Gujarat, Indian farmer and campaigner Bhaskar Save demonstrated that by using traditional methods, his yields were superior to any farm using chemicals in terms of quantity,

nutritional quality, biological diversity, ecological sustainability, water conservation, energy efficiency and economic profitability.

Bhaskar Save died in October, but in 2006 he published a now quite famous open letter to the Indian Minister of Agriculture and other top officials to bring attention to the mounting suicide rate and debt among farmers. He wanted policy makers to abandon their policies of promoting the use of toxic chemicals that the 'green revolution' had encouraged.

According to Save, the green revolution had been a total disaster for India by flinging open the floodgates of toxic agro-chemicals which had ravaged the lands and lives of many millions of farmers (for example, read about the impact Punjab). He firmly believed that organic farming in harmony with nature could sustainably provide India with abundant, wholesome food.

India had for generations sustained one of the highest densities of population on earth, without any chemical fertilisers, pesticides, exotic dwarf strains of grain or 'bio-tech' inputs – and without degrading its soil. For instance, see this analysis which highlights better productivity levels in India prior to the green revolution. (If further evidence is required as to the efficacy of organic farming, see this report, based on a 30-year study, which concludes that organic yields match conventional yields, outperform conventional in years of drought and actually build soil fertility rather than deplete it; and see this report that says that organic and sustainable small-scale farming could double food production in the parts of the world where hunger is the biggest issue.)

Save argued that numerous tall, indigenous varieties of grain provided more biomass, shaded the soil from the sun and protected against its erosion under heavy monsoon rains. But in the guise of increasing crop production, exotic dwarf varieties were introduced and promoted. This led to more vigorous growth of weeds, which were able to compete successfully with the new stunted crops for sunlight. The farmer had to spend more labour and money in weeding or spraying herbicides. In effect, farmers were placed on a chemical treadmill as traditional pest management systems were destroyed and soil degradation and erosion set in.

Moreover, this water-intensive, high external input model of agriculture led to the construction of big dams, indebtedness, population displacement and a massive, unsustainable strain on water tables. Save noted that more than 80% of India's water consumption is for irrigation, with the largest share hogged by chemically cultivated cash crops. Maharashtra has the maximum number of big and medium dams in the country. But sugarcane alone, grown on barely 3-4% of its cultivable land, guzzles about 70% of its irrigation waters.

For Save, in a country of farmers, it was essential to restore the natural health of Indian agriculture to solve the inter-related problems of poverty, unemployment and rising population. See his arguments in more detail <u>here</u>.

Such views may be out of step with global agribusiness interests and the international bodies, national governments and regulatory bodies they have co-opted or hijacked (see <u>this</u>, <u>this</u>, <u>this</u>, <u>this</u>, <u>this</u>, <u>this</u> and <u>this</u>), but there is an increasing awareness across the globe that the type of viewpoint put forward by Save and many others is valid.

Of course, millions of farmers across the world already knew that what Save had stated was correct long before he said it and have for a long time been organising and resisting the industrialised model of petrochemical-intensive and GMO farming being imposed across the planet. They are in step with what the International Assessment of Agricultural Knowledge Science and Technology (IAASTD) report (among others) advocates: a shift towards organic farming and investment in and reaffirmation of indigenous models of agriculture.

Likewise, botanist <u>Stuart Newton's</u> notes that the answers to agricultural productivity do not entail embracing the international, monopolistic, corporate-conglomerate promotion of chemically-dependent GM crops. He argues that India must restore and nurture its heavily depleted, abused soils and not harm them any further with chemical overload, which is endangering human and animal health.

Newton provides good insight into the vital roll of healthy soils and their mineral compositions and links their depletion to the green revolution. In turn, these degraded and micro-nutrient lacking soils cannot help but lead to denutrified food and thus malnourishment: a very pertinent point given that the PR surrounding the green revolution claims it helped dramatically reduce malnutrition.

Over the past few years, there have been numerous high level reports from the UN and development agencies putting forward proposals to favour small farmers and indigenous agriculture, but this has not been translated into sufficient action by national governments on the ground where small farmers increasingly face marginalisation and oppression due to corporate seed monopolies, land speculation and takeovers, rigged trade that favours global agribusiness interests and commodity speculation (see this on food commodity speculation, this on the global food system, this by the Oakland Institute on land grabs and this on the impact of international trade rules).

In fact, these reports seem to have been largely ignored by offialdom in India, which seems to be intent on following World Bank advice on removing 400 million out of agriculture, thus <u>capitulating</u> to US agribusiness interests and in the process seeking to <u>demonise</u> those who criticise the prevailing trend. The erroneous reasons behind this forced displacement (largely by making agriculture financially unviable) and the impacts are discussed in the article '<u>Global Agribusiness Hammering Away at the Foundations of Indian Society</u>'. The urban-centric model of 'development' being pursued is unsustainable and is wholly misguided at best and at worst little more than a con-trick.

United Nations Special Rapporteur on the Right to Food, <u>Professor Hilal Elver</u>:

"Empirical and scientific evidence shows that small farmers feed the world [see this]. According to the UN Food & Agricultural Organisation (FAO), 70% of food we consume globally comes from small farmers... Currently, most subsidies go to large agribusiness. This must change. Governments must support small farmers."

Despite the situation adopted at the top in India, it should be noted that a good deal of inspiring work is taking place.

In Tamil Nadu (South India), for example, women's collectives have been organising to restore traditional foods and farming methods, resulting in lower costs, higher yields and improved nutrition. Before the green revolution, there were 14,000 different varieties of paddy, but these traditional varieties were displaced by hybrid varieties which only grow if chemical fertilisers are used.

Sheelu Francis is General Coordinator of the Women's Collective of Tamil Nadu and is involved in a fightback against the deleterious social, economic and environmental impacts of the green revolution. She states that by practicing agroecology, an increasing number of women farmers are now free from chemical fertilisers and pesticides and grow many crops together – grains, lentils, beans, oilseeds – to create biodiversity, using maximum input from the land within the farm to produce food.

With the onset of the green revolution, farmers gave up traditional farming practices and agriculture systems. Francis says that farmers were encouraged to grow rice because of government subsidies which promoted growing rice, especially with hybrid seeds and chemicals. Rice paddies use lots of water, so when it is the dry season or when there is drought, there is no production at all.

The use of chemical fertilizers hurt the health of the people, according Francis, not just because of the chemicals but because people rely on polished rice for their nutrition, which is not very nutritious (she says 46% of children are malnourished in Tamil Nadu).

When you combine the effects of soils depleted of nutrients, monocrop diets and chemically-laden food, you have a recipe for catastrophe.

Little wonder then that people are now going back to traditional farming practices and growing traditional crops, which are more nutritious, provide a balanced diet and help maintain soil health

However, it is an uphill struggle, as Francis notes:

"People who try to hold onto their ways of life are marginalised from their land, their seeds, and their way of farming. Now the industries are trying to take over, and to some extent they have succeeded. That is why we are strongly opposing Monsanto and Syngenta and the whole project of GM (genetically modified) seeds."

Elsewhere, in Africa, while Monsanto and The Gates Foundation are trying to force through a <u>corporate-controlled</u> GMO/green revolution, the <u>Oakland Institute</u> recently published research that highlighted the "tremendous success" of agroecology across the continent. By combining sound ecological management, including minimising the use of toxic inputs by using on-farm renewable resources and privileging endogenous solutions to manage pests and disease, with an approach that upholds and secures farmers' livelihoods, agroecology essentially embodies a social movement for positive change.

Anuradha Mittal, Executive Director of the Oakland Institute, says that the research provides irrefutable facts and figures on how agricultural transformation can yield immense economic, social, and food security benefits, while ensuring climate justice and restoring soils and the environment. Frederic Mousseau, Policy Director of the Oakland Institute, who coordinated the research, adds that the research debunk the myths about the inability of agroecology to deliver and highlights the multiple benefits of agroecology, including affordable and sustainable ways to boost agricultural yields while increasing farmers' incomes, food security and resilience.

There are many stories about such local projects from across the world and it is encouraging. However, what is ultimately required is a national-level and international-level commitment to stop prioritising chemical-industrial agriculture at the expense or indigenous agriculture, to stop handing out massive

subsidies to agribusiness and to get off the destructive and wholly unsustainable and poisonous chemical

treadmill.

"Agroecology is more than just a science, it's also a social movement for justice that recognises and

respects the right of communities of farmers to decide what they grow and how they grow it." Mindi

Schneider, assistant professor of Agrarian, Food and Environmental Studies at the Institute of Social

Studies (ISS) in The Hague."

As Mindi Schneider implies above, agroecology is essentially a system that prioritises local communities,

smallholder farmers, local economies and markets. It is a system that the Rockefeller-backed green

revolution has been dismantling across the globe for the last 60 years or so. The green revolution is in crisis

and is causing massive damage to the environment and to farmers' livelihoods to the point where ecocide

and genocide is occurring and the cynical destruction of agrarian economies has taken place. The solution

ultimately lies in challenging the corporate takeover of agriculture, the system of 'capitalism' that makes

such plunder possible and embracing and investing in sustainable agriculture that is locally owned and

rooted in the needs of communities.

Colin Todhunter is an independent writer – his website is <u>here</u>

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