

Corporations Are Killing Our Best Partners In Fighting Starvation

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9/7/2017

One of the greatest natural assets that humankind has is soil. It can take [500 years](#) to generate an inch of soil yet just a few generations to destroy. However, when you drench soil with proprietary synthetic chemicals, introduce company-patented genetically tampered crops or continuously monocrop as part of a corporate-controlled industrial farming system, you kill essential microbes, upset soil balance and end up feeding soil a limited "[doughnut diet](#)" of unhealthy inputs, while also undermining soil's capacity for carbon storage and its potential role in [combating climate change](#).



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Armed with their synthetic biocides, this is what the transnational agritech companies do. In their arrogance (and ignorance), these companies claim to know what they are doing and attempt to get the public and various agencies to bow before the altar of corporate "science" and its [scientific priesthood](#). But in reality, they have no real idea about the long-term impacts their actions are having on soil and its [complex networks](#) of microbes and microbiological processes. Soil microbiologists are themselves still trying to comprehend it all.

That much is clear in [this article](#), which discusses a report by the American Society of Microbiologists (ASM). Acknowledging that farmers will need to produce 70 to 100 per cent more food to feed a projected 9 billion humans by 2050, the introduction to the report states:

"Producing more food with fewer resources may seem too good to be true, but the world's farmers have trillions of potential partners that can help achieve that ambitious goal. Those partners are microbes."

Linda Kinkel of the University of Minnesota's Department of Plant Pathology is reported as saying:

"We understand only a fraction of what microbes do to aid in plant growth."

As a result, a group of microbiologists have challenged themselves to bring about a 20 per cent increase in global food production and a 20 per cent decrease in fertilizer and pesticide use over the next 20 years — without what they call the snake oil-vending agribusiness interests in the middle.

These microbiologists are correct. What is required is a shift away from what is increasingly regarded as [discredited](#) "green revolution" ideology. The chemical-intensive green revolution has helped the drive towards greater monocropping and has resulted in [less diverse diets](#) and [less nutritious](#) foods. Its long-term impact has led to soil degradation and mineral imbalances, which in turn have adversely affected human health, as outlined in [this report](#) on India by botanist Stuart Newton (page nine onward).



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Adding weight to this argument, the authors of [this paper](#) from the International Journal of Environmental and Rural Development state argue that cropping systems promoted by the green revolution have resulted in reduced food-crop diversity and decreased availability of micronutrients. Micronutrient malnutrition is causing increased rates of chronic diseases (cancer, heart diseases, stroke, diabetes and osteoporosis) in many developing nations, with more than 3 billion people being directly affected by the micronutrient deficiencies.

They conclude that the unbalanced use of mineral fertilizers and a decrease in the use of organic manure are the main causes of nutrient deficiency in the regions where the cropping intensity is high. The link between micronutrient deficiency in soil and human nutrition is clear.

Referring to India, botanist Stuart Newton states (page 24):

"The answers to Indian agricultural productivity is not that of embracing the international, monopolistic, corporate-conglomerate promotion of chemically-dependent GM crops... India has to restore and nurture her depleted, abused soils and not harm them any further, with dubious chemical overload, which are endangering human and animal health."

Newton provides insight into the importance of soils and their mineral compositions and links their depletion to the green revolution. In turn, these depleted soils cannot help but lead to mass malnourishment. This is quite revealing given that proponents of the green revolution claim it helped reduced malnutrition.

And Newton has a valid point. India is losing **5,334 million tonnes** of soil every year due to soil erosion, much of which is attributed to the indiscreet and excessive use of fertilizers, insecticides and pesticides. The Indian Council of Agricultural Research reports that soil is become deficient in nutrients and fertility.

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The degradation of soil due to chemical-intensive farming is a global phenomenon. For instance, the U.S. has possibly **60 years** of farming left due to soil degradation, while the U.K. has possibly **100 harvests** left in its soils.



We can carry on down the route of chemical-intensive (and [soil-suffocating, nutritionally inferior](#) GM crops), poisonous agriculture, where our health, soil and the wider environment from [Punjab](#) to the [Gulf of Mexico](#) continue to be sacrificed on the altar of corporate profit. Or we can shift to organic farming and agroecology and investment in indigenous models of agriculture as advocated by [various high-level agencies and reports](#). For example, if there is sufficient commitment to [scaling up agroecology](#) in both the West and countries in the Global South, we could tackle many of the world's problems, from unemployment, poor health, bad food and food security to regenerating soils and rural communities.

The increasingly globalized industrial food system that transnational agribusiness promotes is [not feeding the world](#). It is, moreover, responsible for some of the planet's [most pressing political, social and environmental crises](#).

Companies like Monsanto, Bayer and Syngenta quite naturally roll out their endless spin, arguing that we can't afford to live without them. But we can no longer afford to live with them or their deceptions as the UN's special rapporteur on the right to food [Hilal Elver implies](#):

"The power of the corporations over governments and over the scientific community is extremely important. If you want to deal with pesticides, you have to deal with the companies."

And as we currently see with the various [lawsuits against Monsanto](#), part of "dealing" with these corporations (and eventually their board members and those who masquerade as public servants but who act on their behalf) should involve the courts.