ANTH 340

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Soil Quality and Food Sustainability

It is said that people are what they eat. If they are eating food grown in unhealthy soil then their food, even if it is fresh vegetables and grains, will not be as healthy. Soil matters. Soil health matters more. Food sustainability does not mean that there will be plenty of food for everyone, as the industrial farm chemical companies suggest, but by having sufficient high quality food that is grown in high quality soil. Chemicals do not produce healthy soil. Organic farming does. To have sustainable sources of agricultural products it is necessary to have healthy food in healthy soil.

Chemical companies insist that only they can produce enough food to feed humanity, but “Researchers from Iowa have shown that organic farming methods can [yield almost as highly](http://civileats.com/2014/12/10/organic-nearly-as-productive-as-industrial-farming-new-study-says/) as pesticide-intensive methods. Other researchers, from Berkeley, California, have [reached a similar conclusion](http://phys.org/news/2014-12-crops-industrial-agriculture.html)” (Latham). Furthermore, where farming uses industrial methods of agriculture which uses modern chemicals and practices, “…it leaves landscapes progressively emptier of life. Eventually, the soil turns either into mud that washes into the rivers or into dust that blows away in the wind. Industrial agriculture has no long term future; it is ecological suicide” (Latham). Industrial agriculture is, therefore, unsustainable.

There is plenty of food grown all over the world but there is inadequate distribution of food. To feed the extra two-billion people expected before 2050, it will require eating less meat and more fresh foods. Too much of the food produced today is going to feed animals for meat. If people ate less meat there would automatically be more food for people. When animals graze fields they are “helping to mitigate climate change by sequestering carbon in the soil. Grass-reared meat can also be the best option if grazed on land that would not be suitable for any other type of agriculture” (Tomlinson). These changes will help the environment by not putting chemicals in it that will hurt the soil, cause erosion and kill the nutrients.

The United Nations is in favor of organic agriculture because it is a “holistic production management system that avoids use of synthetic (in-organic or chemical) fertilizers, pesticides and genetically modified organisms, minimizes pollution of air, soil and water, and optimizes the health and productivity of interdependent communities of plants, animals and people” (Healthy Food from Healthy Soil).

Massachusetts Institute of Technology (MIT) considers organic farming to be a solution to poor soil quality. Its says that the organic methods increase soil health, using

crop rotation, soil surface mulching, and animal manures and recycled crop wastes as compost. Through the use of these natural nutrient recycling methods, organic farming makes soil more sustainable. Because there is no heavy dependence on synthetic fertilizers and pesticides, soil salinity is decreased and as a result the soil is more fertile (MIT).

The movement away from industrial agriculture is growing. In 2002 many Asian peasant farmers protested being left out of decision makers by governments and agricultural scientists by starting their own research programs. The peasants felt that they were not just being ignored, they felt the science that was being pushed on them was “actively hostile to their way of life” and the scientists were “serving someone else’s needs” such as the companies promoting industrial agriculture (Berry).

I find this topic fascinating and important. I want to pursue this research topic further.

Works Cited

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