Africa, a vast continent, besieged by pestilence, famine, disease and hunger, now faces another threat caused by intensive animal agriculture, also known as factory farming, coupled with a new trend called land-leasing. If not stopped, these threats could spell doom for the continent.

Traditionally, farming in Africa has been small-scale, rooted in agro-ecological methods that respect Earth’s resources and provide a decent living for family farmers. Native bananas, sorghum, sweet potatoes, pumpkin, yams, cassava, millet, numerous traditional vegetables, and other crops have sustained Africa for millennia.

An ever-growing concerted effort is transforming the traditional mode of farming to factory-style food-production methods that emphasize growing ever greater quantities of fewer crop varieties (corn, soybeans, cotton) for export around the world; ever intensifying use of chemical pesticides and petro-fertilizers; replacing traditional seeds and animals with genetically modified seeds and animals; and land-leasing. All in the name of helping African farmers produce more food to deal with hunger plaguing the continent.
The problem: Seeking the solution in boosting yield with modern agribusiness technologies, including genetically modified (GM) crops and animals, is based on a fallacious premise that the inequitable distribution of food and unsustainable agricultural practices that limit Africa’s food security are overwhelmingly technological in nature, when in fact the causes are social. Food scarcity in Africa is partly due to lack of government imperatives to feed people and also to dysfunctional national and international agricultural trade policies. Food shortages are rarely about a lack of food, as there is plenty of food in the world; the shortages occur because of the inability to get food where it is needed and the inability of the hungry to afford it. Some countries in Africa do not have enough food where it is needed, yet people with money have enough to eat where they live. Poverty and inequality causes hunger. As Francis Moore Lappe put it, the problem is caused by a lack of justice. The answer to poverty and hunger lies in creating more just and peaceful societies, elimination of structural adjustment policies imposed by the International Monetary Fund and World Bank, banning some forms of international commodity speculation, eliminating corporate control of food, rectifying inadequate distribution systems, and last but not least improving conditions for sustainable agriculture, not in high-tech fixes.

Factory Farming

The high-tech approach is unsustainable. In addition to the injustice and indignity associated with genetically engineering and intensively raising “livestock” in animal factories, factory farming creates a host of issues, including:

- Land degradation. Escalating soil erosion, compaction, and salinization, declining fertility, agrichemical pollution, soil demineralization, and desertification threaten economic and physical survival.
- Droughts. Recurrent droughts increase soil degradation, and soil degradation magnifies the impacts of droughts on cultivated land and rangeland in many parts of Africa.
- Food sovereignty concerns. Corporate control of the food supply denies farmers and other citizens the independence they need for long-term wellbeing.
- Loss of biodiversity. Use of GM crops can further deplete ecological and agricultural diversity through pollen contamination.
- Social strife. High prices of high-tech, including GM seeds and “livestock” factory farming, drives some small- and medium-scale family farmers from their land. Leaving farmers landless drives them to overpopulated urban areas, subjecting them to poverty, hunger, and infectious diseases. Some turn to crime or commit suicide. On a large scale, such widespread socioeconomic disruption leads to political unrest with many destructive consequences.

Factory-farmed GM animals are less resistant to diseases, some of which can spread to humans. GM animals are often poorly adapted to local ecosystems. Like other “livestock,” they require water and feed than that could otherwise be used to feed hungry people. Farming to feed nonhuman animals diminishes limits or diminishes the human food supply while contributing to the aforementioned land and water crises threatening future food supplies.

Even ignoring hidden costs of factory farming, industrial agriculture is inherently less efficient at producing food than smaller sustainable farms. While large-scale, single-crop (also called monocrop or monoculture) industrial farms produce a large output per worker, diverse-crop sustainable farms produce more food per acre of farmed land. Sustainable farms require more workers and create more jobs, while also feeding more people from less land than industrial farms. Despite decades of claims to the contrary, industrial farming has not relieved famine or hunger throughout the world.

Land Leasing
The second looming threat to Africa is the proposed solution to Africa’s socioeconomic woes known as land-leasing.

Land-leasing is a recent phenomenon that is sweeping the continent, called by some a land grab or a form of agrarian colonialism. Wealthy nations, to secure food for their own populations, seek deals to lease land abroad to grow food strictly for their people, excluding people of the host country. Qatar, Saudi Arabia, and the United Arab Emirates have made such propositions to countries such as Ethiopia, Kenya, Madagascar, and Sudan. Private investors and food companies are also planning to enter into such deals, as well as some designed to acquire biofuels rather than food for the paying nation.

The questions arise, “How can poor nations, struggling to feed their own populations, lease fertile land to other nations?” “Are these deals in any way beneficial to the host nations and their people?” Land-leasing proponents claim such deals will help move host-nation societies from subsistence to commercial farming, generate needed funds for the host nations, and improve the host nations’ infrastructures.

Critics point out that most land-leasing excludes local participation and removes local farmers from their land, leading to more economic hardship and stratification, and intensifies domestic land pressure. All of this can lead to political pressure and instability, producing violent conflict as recently happened in Madagascar.

Furthermore, most land-lease deals are structured primarily to benefit the leasing countries. In most cases, once crops are harvested, they can be exported in their entirety, tax-free. The price paid to lease land in some countries has been exceedingly low.

Another major concern is ecological impacts of land-leasing. Vast plantations grow crops using large-scale intensive monoculture methods involving large quantities of fertilizers and pesticides. At first, results appear spectacular. But these methods risk damaging the long-term sustainability of tropical soils unsuited for intensive cultivation, as described above. They also reduce the diversity of plants, animals, and insect life including pollinators. Intensive use of agrichemicals can cause water-quality problems, and irrigating the land holdings of foreign investors may take water away from local users.

Conclusion

Animal factories, monocrop farming, use of GM plants and animals, and land-leasing are all promoted as ways to improve food security in Africa to move Africa towards development. Unfortunately, none of them improves the dire situation facing Africa and its people. Africa’s solution rests within Africa, and shortsighted solutions that ignore the needs of the people and the dire consequences of ecological damage will only lead to more suffering and strife. Africa’s majority of small-scale farmers practice low-yield agriculture for many reasons, but the solution is to find innovative ways to help them improve their yields, not to ignore or sideline them.

Africa needs foreign agricultural investment to meet its economic needs, and it can benefit from some outside farming innovations. But Africa's small-scale farmers also have a wealth of locally-relevant farming expertise. Supporting and improving on their successful practices, rather than abandoning them, is crucial.

African governments can work to achieve food security by producing foods in ecologically sustainable ways, significantly expanding domestic capacities to produce vegetables, fruits, pulses, and cereals for the African people and by destocking herds.

African governments, in collaboration with donors and civil societies in their respective countries, can implement large-scale ecosystem restoration projects.
African nations can reassess policies and practices that lead to land degradation, desertification, and deforestation and can launch, with the help of donors and civil societies in their respective countries, education programs to raise awareness among Africans of the likely effects of climate change on the continent.

African governments can avoid policies that promote exportation of food produced on the continent or further industrialization of food production, and they can ban GM imports.

More generally, African governments can strive to create just and democratic systems that are responsive to their respective people’s needs.

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Dr. Roba frequently lectures on the health benefits of a plant based diet across the USA and in Africa and is also a frequent guest host on the Vegan World Radio show in Houston, Texas (90.1 FM). He has written in various internet-based media publications on issues of child care in Africa, the environmental and health consequences of meat and dairy consumption in Africa, global hunger, and poverty. The subject of numerous news articles, media stories and interviews, he is recipient of many awards including The Gandhi Peace Award (Society of Peace Oct 2007), the Circle of Compassion Award (Humane Society of the United States, Nov 2007), the Certificate of Merit Award (Ministry of Health, Ethiopia, June 2009), and the Certificate of Appreciation Award (Addis Ababa Health Bureau and Gandhi Memorial Hospital, Addis Ababa, Ethiopia). Dr. Roba can be contacted at 713-213-5952 or by e-mail at roba@ifundafrica.org.

POINTS FOR THE CLASSROOM (send comments to forum@futuretakes.org or post on FUTUREtakes blog):

- The author discusses the transformation of traditional, small scale farming in Africa to factory-style farming – in other words, “massification.” Massification in other areas of human endeavor – e.g., education – has been attributed, at least in part, to the Industrial Age; schools were designed to produce workers for factory jobs.

  - What countertrends might reverse massification processes in developing nations? In developed nations?

  - What cultural values, if any, underlie massification?

- Family farms have also been lost in places other than Africa – for example, the U.S. For its part, China is seeing a similar decline in localized agriculture in some of its western regions, accompanied by urban migration eastward. In addition to the resulting
problems identified by Roba – poverty, hunger, disease, and crime – what are other possible consequences of farmers losing their lands?

○ Like some family farms, various Native peoples have lost their ways of live. Even in developed nations, ways of life have been lost for similar reasons – e.g., obsolescence of occupations and factory closures. What other ways of life might be lost within the next 15 years – and what new ways of life might emerge?

○ As your country’s Minister [or Secretary] of Agriculture, you have been tasked to develop a plan to alleviate hunger and promote balanced nutrition within your national borders. Will you propose remedies that are primarily social and matters of policy – as Roba proposes for various African nations – or will you suggest remedies be primarily technical in nature, and why?

○ In which parts of the world, if any, might the family farm or other small farms survive, and why?

○ Characterize international trade ten years from now, considering nations that have or lack various combinations of capital, resources (including farmland), and manufacturing capability.