Gendered Struggles for the Commons: Food Sovereignty, Tree-Planting and Climate Change

Leigh Brownhill

The negative effect on the atmosphere of emissions produced by the burning of fossil fuels is well-known. Less well-known, however, is the detrimental impact of deforestation. According to the November 2006 Stern Review, emissions from deforestation are greater than the emissions produced by the entire global transport sector.

Africa has the fastest rate of deforestation in the world. Commercial logging and subsistence farming are the main sources of deforestation in Africa, according to the Stern Review and UNEP. As women make up the majority of subsistence farmers in Africa, are they implicated in this widespread deforestation and resultant climate change?

To answer this question we must find out what drives African subsistence farmers to cut down trees. “Population growth” is the typical answer from neo-liberal analysts whose interests lie mainly in protecting multinational corporations’ profit-generating activities. They charge that African women have too many children. Family planning policies and income generation projects are proposed as ameliorative actions to combat poverty and ecological degradation. Some go so far as to suggest that more industrialization is necessary in Africa in order to remove subsistence farmers from the land. But a different answer - and different solutions - emerge when the gendered conflict between subsistence and commercial uses of land in Africa is taken into account.

Let us take the example of Kenya, where 75% of household energy needs are supplied by firewood. Wangari Maathai, Kenya’s former assistant Environment Minister and a 2004 Nobel Peace Prize winner, argues that a country needs to maintain at least ten per cent indigenous forest cover to achieve “sustainable development.” She estimates that Kenya has less than two per cent of such forest cover remaining.

In 1992 Maathai spoke to an international audience at the Sierra Club about how she returned to Kenya in the 1970s after some years of education abroad to find that ancient fig trees were being felled throughout her home area. These trees were customarily never cut down and even the twigs were not picked up from the ground or burned as kindling. Fig trees were sacred, in part because they acted as protectors of the vital water catchment areas. With the expansion of tea plantations in the 1960s and 1970s, the fig trees were sacrificed. Desiccation of the soil quickly followed.

Subsistence farmers in East Africa began to cut down the fig trees not because they no longer respected their age-old customs. Nor did they encroach on the forests because they were having too many children. They cut the trees because there was not enough food being produced after coffee and tea began to be widely grown on and exported from Kenyan farms both large and small. When world market prices for African export crops fell, many male ‘heads of household’ put more land under coffee and tea to make up the shortfalls in income. And when prices rose, these farmers had further
incentives to expand cash crop production. In the process, women’s food gardens were plowed under.

The World Bank and other international institutions touted commercial farming as Africans’ way out of poverty. Beginning in 1980 the Bank encouraged the conversion of food farms to export cash crop plantations with development policies, programmes, research, grants and loans. But the more farmers planted coffee, tea, sugar, cut flowers and cotton, the less land was available for food production. Starvation and malnutrition have become endemic, especially for people in East Africa’s burgeoning city slums and in the arid and semi-arid regions where people’s access to food and water is increasingly at risk. Anemia, stunted growth and vulnerability to disease affect millions, especially women and children. And women have been at the forefront of resisting commercial policies and promoting a return to a food-centred political economy.

To address deforestation, Wangari Maathai founded the Green Belt Movement in 1977 under the auspices of the National Council of Women of Kenya. The Movement sought to counter the decline of both ecological resources and the principles of stewardship that Maathai observed to be coinciding with the advance of commodity production in farming areas. With minimal funding and through self-help efforts, the Green Belt Movement established branches first throughout Central Kenya and then throughout Africa.

The Green Belt Movement encouraged women’s groups to plant trees. Women were educated in seminars held in rural areas about how trees might be planted along boundaries and in different sites within the homestead. The types of trees planted might be chosen for their fruit-bearing capacity, medicinal qualities, ritual purposes, firewood-producing capability, water catchment protection or for their decorative appeal. Women also began to plant trees on public land, including their children’s school compounds, church yards, public squares, road verges and other common lands. Through advocacy and a massive educational campaign, the Green Belt Movement branches encouraged the return to indigenous seeds and cultivation techniques which raised soil fertility and slowed desertification.

When women planted trees, they also strengthened their claims to the land. Women’s tree-planting activities were partially based in customary practices which devolved responsibility for food provision to women. While running tree nurseries and reforesting public areas may not have been ‘customary’ practices, women did apply customary cooperative organizational techniques and indigenous environmental knowledge to the carrying out of these formalized activities, in which they engaged in large numbers. These aspects of customary practice augmented the success of Green Belt ventures and laid the groundwork for the expression of a new form of women’s power: the power to heal the heavily damaged ecology, first in Central Kenya and later across the country and the continent.

The Green Belt Movement used tree-planting as an entry point into wider discussions and actions in five areas: food security, the negative impacts of petro-chemical-based agricultural systems on health and environment, genetically modified seeds, civic education and voter registration. Tree
planting and associated activities were adopted by hundreds of women’s groups, many of which continued to engage in other types of activities such as merry-go-rounds, or collective savings groups, shared work on each others’ farms and collective care for common resources. By creatively combining several of the most pressing needs of Kenya peasant women, the Green Belt Movement engaged hundreds of thousands of rural Kenyans in expanding and defending their rights to control and protect land on which, by the new millennium, they had planted some 20 million trees.

Although the Green Belt activities addressed soil erosion, food insecurity and income generation needs of the rural people, Maathai herself was vilified by President Moi in the 1980s. How did the activities of this ecological movement raise the ire of businessmen and others in the government? The land on which women planted and defended their trees was clearly land not available for mechanized plantation style cash crop production. Women were becoming more and more adamant about the need to limit plantation agriculture and return land to indigenous uses. The subsistence uses of the land that peasant farm women pursued were, however, direct challenges to private interests who wished to buy forest land, clear it and either ‘develop’ or subdivide and sell the land. For the land speculator or plantation owner, the Green Belt Movement was an impediment to trade.

Where industrial logging, mining, plantation agriculture, ranching, real estate development, manufacturing and private ‘game parks’ monopolize large areas of arable land, that land is no longer available for the production of food for local consumption. In other words, cash cropping and other forms of industrial development on already-cleared arable land and pastures have very high opportunity costs. In Kenya, as in many other locations in Africa, those displaced by industrial development search elsewhere for land on which to secure a livelihood. This often involves clearing forests to create space for food production. It is in this way that in Africa, like in Asia and South America, commercial logging and export oriented large-scale farming contribute to the destruction of the local environment and the earth’s climate.

Rural and urban women’s engagement in reforestation in Kenya is integrated into a larger subsistence-oriented farming system focused on self-provisioning and women-controlled trade. This indigenous approach to farming replicates what international social movements call ‘food sovereignty,’ or the right of farmers to choose what to grow, to feed themselves and their communities, and to be free from pressures to commercialize production to the exclusion of food security.

Kenyan peasant women’s ‘food sovereignty’ movement builds upon their subsistence political economy, with its food-centred land and water use practices. This political economy is remarkably free from petroleum product dependence. Food self-sufficiency is moreover a major contributor to reduced transportation and hence reduced use of petroleum products in moving food from producer to consumer. In addition women are directly protecting forests and water catchment areas from real estate development, logging, plantation agriculture and mining.

As Kenyan women engage in reforestation, they shift agricultural practice toward indigenous biodiverse and mixed farming systems. The overall implications of women’s reforestation practices
and subsistence food production include most prominently an articulated realization of a post-climate
destroying agriculture. This realization emanates from a collective culture of commoning that is in
opposition to the post-colonial culture of international exploitation and environmental destruction.

With the dramatic increase in the price of petroleum products in 2005 and 2006, attendant upon the
US Empire’s military onslaughts in the Middle East, the practices of Kenyan rural women have been
thrown into crisis. This follows from food growers’ confrontations with entrepreneurs (small and
large) who give priority to the production of charcoal from any available trees. This charcoal-
intensive response to the absence of kerosene and other cooking and heating fuels directly counters
women’s prioritization of tree-planting and small-scale, biodiverse food production.

In Kenya and elsewhere in Africa where rain-fed agriculture is the dominant economic activity,
extractive industries such as commercial logging, mining and export-oriented agriculture are part of
the climate change problem, leading to a downward cycle of deforestation, ecological decline,
drought, conflict, famine and disease. African women’s pursuit of ‘food sovereignty,’ through
various avenues to shift land-use practices towards conservation, food production and other uses of
the commons which mitigate climate change, can only make small gains unless an overall
transformation takes place. This transformation requires an end to the commercial policies and
activities which strip Africa’s environment and deny Africans’ access to the necessities of life. This
transformation also requires ‘energy sovereignty,’ via a strong emphasis on the localized
development of solar, wind and water power, all of which have tremendous potential in Africa.

This article presents alternatives to the recommendations arising from mainstream climate change
studies. The Stern Review and other reports suggest that carbon trading world can provide solutions
to climate change. Carbon trading relies heavily on the privatization of nature, which exacerbates
social inequality and allows industrialists to continue their rapacious activities. Within the carbon
trade clauses of the Kyoto Protocol, women’s collective tree-planting activities are not recognized
as contributing to the reversal of climate change.

To return to the original question about African women’s contribution to climate change via
deforestation, it is pertinent to ask whether we should insist that Africans stop growing food so that
African land can instead be allocated to the extraction of resources such as petroleum, hardwood,
gold, diamonds, titanium and other minerals, as well as the production of exported agricultural
products such as chocolate, coffee and tea? Or can we ask Africans to keep their food-producing
activities out of large areas of forest which have been sold to northern industries as carbon sinks?
The answers is clear enough if one is a stock-holder or CEO in a mining venture. For the rest of us,
the priority should be clear: African land is for African peoples, especially food producers geared
towards the supply of local and regional markets. Herein lies a solution to deforestation and hunger
on the continent.

In January 2006 Klaus Toepfer, the head of the United Nations Environment Programme (UNEP),
warned that rainfall patterns in East Africa were at risk from climate change and the loss of forests,
grasslands and other key ecosystems. He recommended that forests not only be maintained and
conserved, “but that we invest in their restoration and expansion” (UNEP, 12 January 2006). This “restoration and expansion” is already underway in the ‘food sovereignty’ movement, of which the Green Belt Movement is an outstanding example. Everyone agrees that global action is required to combat global climate change. Africa’s women-led movements ‘from below’ provide an alternative path out of the profit-centred, exclusionary, industrial cul-de-sac and towards a revitalization of the commons that serves the needs of all.

Further reading


Stern Review on the Economics of Climate Change, September 2006, http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/stern_review_report.cfm

This article was published as:
Also, planting trees is not just about stopping climate change. We’re facing a biodiversity crisis, says Spracklen. Planting trees can help with both, he says, but only if we do it right. The message, then, is that trees can play a significant role in stopping dangerous climate change provided we plant them in the right places. The challenge will be finding ways to fit huge new forests into our societies in such a way that people accept them. This article has been edited on 3 June 2020 to add details of the correction issued in Science on the paper by Thomas Crowther and his team. Climate change is one of the most devastating problems humanity has ever faced and the clock is running out. Learn more about Climate. Impacts. Projected impact of climate change on yields of corn, wheat, soybeans and cotton by the years 2080-2099. Areas where yields are projected to decline (warmer colors) include some of our most important agricultural regions, such as the Corn Belt and California’s Central Valley. Map: Fourth National Climate Assessment, Figure 7.6 (Source data: Hsiang et al 2017). The growing infection and fatality rates at meat processing plants prove that these voluntary guidelines are not enough. Every worker on the frontlines deserves enforceable, science-based protections from COVID-19. Food Sovereignty is defined as: “Food sovereignty is the right of peoples to define their own food and agriculture; to protect and regulate domestic agricultural production and trade in order to achieve sustainable development objectives; to determine the extent to which they want to be self reliant; to restrict the dumping of products in their markets, and; to provide local fisheries-based communities the priority in managing the use of and the rights to aquatic resources. Food sovereignty does not