Food, Oil, and Climate in sub-Saharan Africa

How is climate change different for women? . . . . Because women do different work, they have access to different resources and have different priorities in their lives in most societies.' (WE Speak 2007)

The impacts of climate change are not gender neutral and are likely to exacerbate existing gender inequalities. (WEDO 2010)

These statements confirm that it has long been known that climate impacts affect women's labor negatively. Many women in sub-Saharan Africa (SSA) are responsible for growing the subsistence agriculture that feeds their family. In West Africa, by 2019, just over 54% of the population were already in moderate or severe food insecurity; in the *next year alone*, the number jumped past 68% (FAO 2021, 19). This article exposes in SSA, and West Africa in particular, how the oil industry can and does work against food security by paying little, if any, attention to women's role in subsistence agriculture.

The Fossil Fuel Industry

The fossil fuel industry has a long-standing vested interest in resisting climate policy that would take its calculated control of energy transition out of its hands and move more quickly than would be optimal for the industry. The U.S. provides a strong example of finance over human and environmental health based on corporate and government interests. These corporations work at the origin and heart of the greenhouse gasses that are driving climate change. The fossil fuel industry in the U.S. created a campaign to undermine public belief of the reality and impacts of climate change (Monbiot 2007) by arguing for benefits of climate change and the economic risks of climate mitigation and adaptation (McCright and Dunlap 2000). More disturbingly, disinformation campaigns were launched against climate science and scientists (Brown 2013, 126-36 and 225-30). Exxon, for example, was accused of cyberbullying scientists, funding public relations strategies to undermine confidence in climate science, supporting organizations with reckless disregard of climate science, manufacturing false claims, and a number of smaller twists of the truth (Brown 2016). 'Balanced reporting,' that called for equal space allotment in reporting to the public by both climate deniers and scientists, was shown to have biased 70% of news media (Boykoff 2007, 108; Boykoff 2008).

In 2003, James Inhofe, while serving as the chair of the U.S. Senate Committee on Environment and Public Works, reported to the Congress that 'over 4000 scientists, 70 of whom are Nobel Prize winners, signed the Heidelberg Appeal, which says that no compelling evidence exists to justify controls of greenhouse gas emissions, manmade greenhouse gas emissions. They agree it is a hoax' (Inhofe 2003, S10020). The 1992 Appeal had been brought forward by the tobacco and asbestos industries who understood 'sound science' to be industry-funded science. Hence, given corporate perspectives on climate, the Intergovernmental Panel on Climate Change, founded in 1988, was considered in the Appeal to be 'junk science' (Powell 2012, 56). And Inhofe passed that n to the U.S. government. He concluded that anthropogenic climate change 'is the greatest hoax ever perpetrated on the American people,' and that 'all the phony science [might] destroy the foundation, the greatness of the most highly industrialized nation in the history of the world' (Inhofe 2003, S10022), and closed by rolling a snowball across the floor.

Later, during Trump's 2016-20 Presidency, Scott Pruitt, head of the Environmental Protection Agency, deleted climate change from the EPA's public website, still claiming uncertainty about the human contribution to climate change (Leber and Schulman 2017). Climate risk reported as uncertainty or lie was still being 'used to smokescreen … and to deter policy response' to the changing climate (Glazebrook and Goldsby 2018, 148).

The U.S. thus provides a clear example of preference of economics over people and environment. Corporate interests with government support in the global North have polarized the climate debate using 'complex and furtive processes' (Farrell 2015). Millions are spent each year by oil companies to fight climate legislation (Weiss et al. 2010) and support organizations that lobby against climate policy (Brown 2016). Scientific uncertainties and mitigation costs have been emphasized (Jamieson 1992, 141; Antilla 2005, 345-7, 350). Despite agreement since 2014 of at least 97% of climate scientists, who actively publish about climate change and attribute it to the human species (IPCC WGIIA SP 2014), the economic challenges of addressing climate change have not been resolved.

Gender

The true cruelty of choosing wealth rather than life is the impact of climate change on the poorest and most vulnerable. Globally, many of these are strong women: subsistence farmers working to feed their family, whose agriculture is not irrigated—only 4% of SSA is irrigated (Burney et al. 2013)—so they must rely on the rains. The current hunger in SSA can largely be attributed to the climate impacts of the fossil fuel industry that largely provides wealth to men in the global North: Business Insider notes 13 women in its account of the richest 100 people in the world, with the five women in the top 50 being in the U.S. along with one more in France (Business Insider n.d.). That is, global wealth belongs much more to men than women, and more for people in the global North. One of the consequences for women farmers in the global South are thus very much at risk in food security. This is not a trivial issue: in rural areas, for 1.4 billion women, agriculture is their primary livelihood (Glazebrook et al. 2020), and just over a third of those women, i.e., ~500 million, do not own land and receive barely 5% of available agricultural resources (FAO 2012).

Ghana, as an example, was reclassified in 2007 by the World Bank system from 'low' to 'middle income,' thus suggesting economic growth, poverty reduction, and progress in development that might mitigate climate change, increase agricultural productivity, and begin to overcome hunger. By 2007, however, women farmers in the Upper East Region (UER) were already challenged by climate impacts. That same year, at a meeting of the UN Commission on Sustainable Development (CSD), the Director of Environment in Ghana noted that Ghanaian women are especially vulnerable, socially and economically, to climate change (Kuuzegh 2007). At the subsequent 2009 CSD meeting, he reported that agricultural impacts of land degradation, desertification, and soil erosion are hardest at the local level, with the most affected being poor, especially women dependent on natural resources for family survival (Kuuzegh 2009). Ghana had then already for a long time been known to suffer a 'gender gap' (Dwivedi 1980; Dwivedi et al. 2001). Ghanaian women farmers experience cultural, social, and economic bias, but also the physical impacts of climate change on ecosystems.

Regions like Ghana's UER are vulnerable to unpredictable weather patterns. Heat, crop pests and disease, drought and flooding reduce productivity and are increasing (IPCC WGIIA SP 2014, 21). Less than 1% of land is irrigated (MOFA n/d; World Bank 2010), so women are dependent virtually entirely on the rains. In 2007, the rainy season in Ghana's UER began with an

extended drought that reduced productivity until the drought ended with a catastrophic flood in which fifty-six people died, 330,000 were left homeless, and many had little to eat until the return of the rains in the following year (Glazebrook 2011, 763). This was a disaster, but changing weather patterns are a much more of a threat. By 2017, total crop failure was predicted for roughly every fifth year (USAID 2017). By 2024, however, unreliable rain patterns became regular. In response, women in Ghana's north-east, for example, changed from traditional food such as groundnut and millet to drought-resistant rice that is reliable for surviving dry stretches but provides virtually no nutritional value such as protein and calcium that support child growth and pregnant and lactating women. Moreover, rice is not viable over the long term because its productivity drops 10% for each Global Mean Surface Temperature increase of 1°C (Peng et al 2004).

Though Ghana is now 'middle income,' its women farmers still have significant poverty. Addressing poverty would improve women farmers' situation, but Ghanaian women, like women elsewhere, are caught in the nexus of the 'invisibility of women's labor,' (Waring 1988), 'the feminization of agriculture' in which the proportion of female farmers is growing globally (Vaqué 2017), and the 'feminization of poverty,' in which women are also becoming a larger proportion of people living in poverty, first acknowledged at the 1995 United Nations 4th World Conference on Women (UN Women 2020).

Conclusion

Ghana is using oil development to address poverty, but this strategy is colliding with the invisibility of women's subsistence agriculture that is for many, especially children, their only promise of avoiding hunger. Globally, both governments and international governance are failing to respond to climate change as an urgent issue that must be seriously addressed in the immediate future. This is especially harming SSA that is caught in the failure of global distributive justice that was recognized in 1992 by the United Nations Framework Convention on Climate Change (Kabasa and Sage 2009, 22). The lack of justice for SSA is that, despite being the second-largest continent, it consistently generates only 3.7% per capita of greenhouse gasses that drive climate change (Canadell et al. 2009). Yet SSA is suffering the most climate-related harm as a continent (Glazebrook et al. 2020, pp.7-8).

Africa was the only continent not to meet the 2015 Millennium Development Goal of 50% poverty reduction (UN 2015) which must remain in the minds of SSA national leaders as the decade rushes toward the 2030 target for the Sustainable Development Goals. Increasing national wealth can, however, be not the same as alleviating poverty. Poverty is deeply connected to agriculture in SSA where many farmers are women subsistence growers responsible for family food security. SSA is thus caught between the promise that oil can increase wealth and the impact of climate change on crop productivity and food security. In short, contemporary development in SSA is impossible if climate impacts on agriculture are not substantially addressed with recognition of women farmers' role in food security and attention and response to their current situation of little support to feed current and future generations. Women's agriculture in SSA is a starting point for understanding that life is more important for current and future generations than wealth and corporate finance.

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