

## Saving Africa's agroecological food baskets from the agroecology movement

**A**s agroecology activism increases within the global food system, many African communities involved in agriculture and food production, as well as consumers, are getting confused.

This confusion stems from antagonism between the continent's need for a green revolution — defined as access to improved seeds and modern pest management technologies, including gene editing tools — and the agroecology movement pushed by Western NGOs operating in Africa. Despite the promise found in scientifically proven agricultural innovations that can increase yield, African farmers still face intruders' ideology on to how to feed themselves.

Peasant farmers can't easily determine which agroecology principles to adopt or why technologies like GMOs and gene editing that are used elsewhere — including the countries where the agroecology movement originated and raises funds — can't be made available for them. It is wrong to leave Africans at the mercy of organic farming, which is nearly impossible in a tropical climate where locusts, fall armyworm, *Tuta absoluta* and other pests ravage crops.

To resolve the dilemma of conflicting food production ideologies, it is important to look at the facts and the existing limitations on regions that previously comprised Africa's agroecological food baskets. Traditional crops like teff in Ethiopia and corn, which was introduced in colonial times to East Africa, have benefited from the ideal climatic conditions of recent generations to meet the continent's nutritional demands. But since the 1980s, food security in these regions has changed, mainly due to global warming, which manifests as drought, invasive pests and plant diseases.



Teff sorting in Ethiopia. Credit: Ryan Kilpatrick/Shutterstock

The situation worsened during an era of urgent humanitarian food aid from Europe and the United States that followed a series of wars and armed conflicts and failed to foster African agricultural sustainability. The food basket regions couldn't update their technologies and now face the added pressure of a rapidly growing population.

African farmers and other scientifically informed stakeholders understand the importance of equipping our farmers with the right tools, including GMOs, hybrid seeds and proven safe pesticides, in order to protect the farmers' investments and ensure the continent's self-reliance. It is very wrong — and a matter of social justice — to use false claims about environmental concerns, indigenous seeds and the preservation of Africa's food heritage to block an entire population from accessing technologies that can save traditional crops and increase productivity. The activists' actions are condemning one population to an endless cycle of poverty.

At a time when Africa's farming communities are facing the food security impacts caused by climate change, they are forced to use 50-to-60-year-old seeds and crop varieties introduced during the colonial time that no longer provide resistance to today's new pests and diseases. The agroecology movement claims these old seeds must be protected from the African green revolution. If that weren't cruel enough, the "organic only" activists are also lobbying to ban the few existing African pesticides and fertilizers, even though they are scientifically approved and recommended by the Food and Agriculture Organization and

others to fight pests.

Today's agroecology promoters are also using misinformation to lobby local institutions with false claims that pesticides, fertilizers, hybrid seeds, GMOs and gene editing aren't safe. Their fear mongering is a strategy intended to prevent African farmers from adopting new technologies.



Protesters fight GMO use in South Africa in 2013. Credit: Getty Images

The agroecology movement's attempts to prevent Africa from using gene editing technology is wrong and threatens to drive Africa's nutritionally diverse indigenous food crops to extinction. Crops like [Kayinja](#) and many East African endemic banana varieties succumbed to fusarium wilt (also known as [Panama disease](#)) even as gene editing offers a way to help save and revive these important crops. The genetic diversity of African seeds offers an endless source of desired breeding traits derived from locally evolved plants that are resistant to some of the world's most challenging pests and disease. Through gene editing, these traits can be used to breed hardier crops.

If today's agroecology ideologists are able to control Africa policymaking, they pose a threat to the more than the [690 million people going to bed hungry each night](#). In places like Ethiopia, where the majority live on one important crop like teff, a single drought or a locust attack could kill more people than the 140,000 who died when the nuclear bomb was dropped on Hiroshima. One million Ethiopians died in the [1984-85 famine](#), and the Horn of Africa has continued to experience political and economic instability. The youth of this disturbed agroecological zone migrate to the West in search of hope and a better future. People need to understand the link between poor agricultural policies in Africa and the regional security disturbances



that have led to thousands of desperate migrants drowning in the Mediterranean Sea.

International aid agencies and independent research institutions predict climate change will cause more [potential harm to the African farming communities](#) than the rest of the world. Rather than spending billions preparing for a humanitarian mission in South Sudan, simply releasing high-yielding, pest-resistant and drought-tolerant maize would stop [tribal disputes over grassland](#) that often start wars. Ample production of maize would feed livestock and increase milk production, boosting the economy and stabilizing pastoral communities.



Farmers tend to their crops in Ayii, Torit County, South Sudan. Credit: Rick D'Elia/USAID

Opening up to biotechnology and intensifying R&D in crop protection remains the main hope for emancipating African communities and supporting economic and food security independence. Just as mobile phone technology changed Africa's financial landscape, innovative agricultural technologies in crop breeding are a solution to malnutrition and a source of entrepreneurial activities to employ women and youth.

African scientists are discovering new biotech-based solutions to combat pests and diseases and it would be a shame if these technologies can't be used to pull Africans out of their misery. The rest of the world has adopted and benefited from GMOs and gene editing technology and is now making tremendous cash

out of the African food production policy dilemma. It is becoming quasi-impossible for West African dairy farmers to break even due to high milk productivity in Europe turned into [cheap powder milk now flooding the formal and informal ECOWAS](#) market. But the European dairy business would not be profitable without the GM maize and soybeans imported from the US and Brazil.

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Unequal access to technologies, coupled with climate change, condemns Africans to poverty and food dependency. This injustice to the people and future of African is mainly propelled by the systematic spread of misinformation by activists who raise funds in the name of agroecology from the same rich Western nations that have access to biotechnology. They are spoiling the future and socio-economic stability of African nations.

While the future of food security on the African continent ultimately lies with the continent's policymakers, the fight to save Africa's traditional food sovereignty begins with ignoring agroecologists from the West. The agenda of these non-profits and activists is not environmentalism but keeping our beautiful continent and its people in a state of food dependency.

Africa's green revolution must be implemented with a total exclusion of the Western agroecology movement. Gene editing tools are not the enemy of ecology. Rather, they offer the hope of reducing agriculture's carbon footprint, controlling invasive species and building a science-based future for the youth of Africa. They shouldn't have to die in the Mediterranean when tools like biotech can solve the food security problems at home.

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