

Viewpoint: Anti-biotechnology activists claim Western corporations ‘colonize’ the developing world. Here’s why they are wrong

Today, many scientific discussions are shot through with [social justice rhetoric](#), and the debate over food security in the developing world is no exception. Battling hunger isn’t just about raising living standards, in part, by giving farmers access to important technologies like biotech crops, but confronting “colonial legacies” and embracing “Indigenous knowledge systems.” Those of us who challenge this narrative have embraced a technocratic version of reform that “is colonial in its reliance upon and perpetuation of the logic of conquest.”

That’s according to an essay at The Counter called [Decolonizing the GMO debate](#) by Benjamin R. Cohen, a [professor](#) of engineering studies at Lafayette College. His Byzantine rhetoric comes from [Critical Theory](#), which seeks “to make visible the underexamined or invisible presuppositions, assumptions, and power dynamics of society and question, criticize, and, especially, problematize them.” Starting with that view, Cohen’s specific complaint seems to be that Western GMO advocates are too invested in producing more food:

By arguing that efficiency, quantity, and scale are the most important features of a food system—that’s how you feed an ever-growing population, this argument goes—it rests comfortably on a century-old production-focused ideal that itself relies on colonial relations, export market metrics, and certain types of oppressive knowledge production.

That’s nonsense dressed up in academic language. The simple fact is that we need to produce more food to feed more people, and technological innovation is an integral part of this effort—which is often led by scientists and farmers in developing countries. There is nothing “oppressive” about it.

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Advocates of “scientism”?

In support of his thesis, Cohen argued that “GMO proponents” have improperly framed the debate “as a matter of scientific literacy.” He took aim specifically at Cornell University’s [Alliance for Science](#) (AFS), a nonprofit that expertly refutes anti-biotechnology myths and advocates for scientific progress in the developing world. AFS and other proponents of biotech crops, Cohen alleged, have embraced a kind of “scientism” that promotes “technical fixes to more-than-technical problems.”

This is wrong in every way. Groups like AFS argue that biotechnology helps address very specific issues. Insect-resistant [cowpea](#), for example, helps farmers protect their crops from ravenous pests, giving poor Africans access to a protein-rich staple food they may not be able to afford otherwise. In contrast, misguided bans on biotech crops [rob developing countries](#) of many millions of dollars that would improve

their living standards.



Corporations are accused of grabbing up land and resources Credit: Action Aid

It's certainly true that science [can be misapplied](#) to a variety of social ills it cannot solve. Along the same lines, biotechnology is not a cure-all for the world's problems, but its advocates [have never](#)—I repeat, they have never—claimed otherwise. That said, activists (and engineering studies professors) who oppose biotech crops developed by Monsanto and other Western companies are on the wrong side of the evidence; they have allowed their anti-corporate ideology to cloud their analysis. Using feel-good rhetoric to critique “colonial legacies” and defend “Indigenous knowledge systems” is fashionable at the moment, but it also harms the very people social justice activists claim to be concerned about.

“Fixing” nature

Cohen went on to complain that

The GMO proponents' technocratic version of reform ... puts nature in the position of an

'Other,' a separate sphere to be fixed or improved not just by humans but by Western, market-oriented humans. We are not part of ecosystems; we are in charge of them. Scientists are "designing" nature.

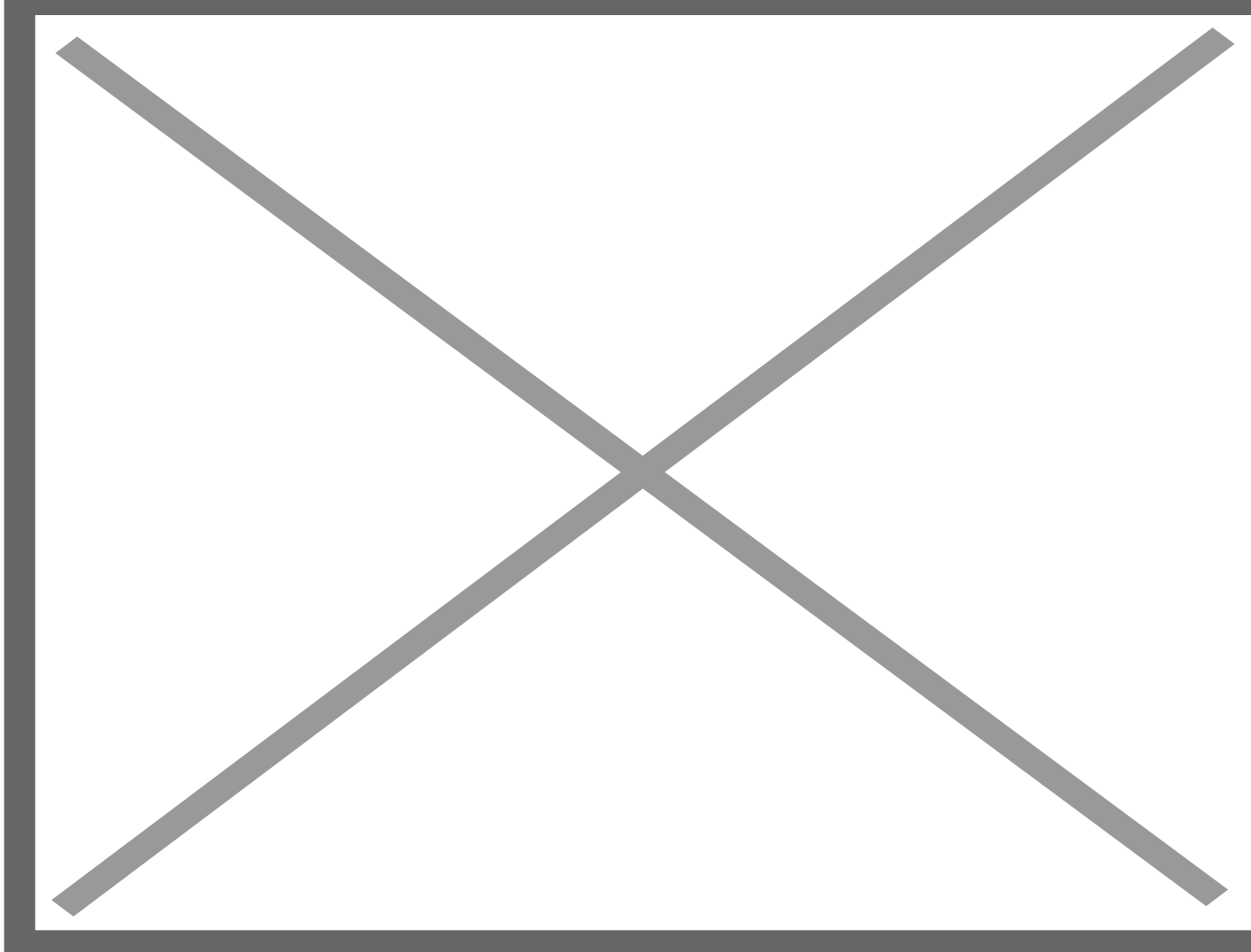
One has to wonder if Cohen feels the same way about COVID-19 vaccines. Did the "Western, market-oriented humans" at Pfizer and Moderna wrongly redesign nature by engineering powerful drugs that save lives? Did the US disregard indigenous ways of knowing by donating [millions of vaccine doses](#) to developing countries? It's an absurd line of questioning, obviously, but the same is true in the context of food production. Technological innovations can benefit the entire world, no matter where they originated.

Nigerian science writer Uchechi Moses made this point very eloquently in a recent article debunking the claim that Western billionaires are taking over the [food supply](#):

The truth is that African farmers need biotech crops to feed themselves and their neighbors, as climate change makes farming an increasingly difficult profession. Consumers desire GMO-derived products for their superior quality and greater nutritional content. The continent's population is skyrocketing and incomes are rising, which fuels demand for a greater variety of foods. It is science, not conspiracy theories, that will allow Africa to meet these challenges.

Moses added that organizations like the International Institute of Tropical Agriculture (IITA) and the National Biosafety Management Agency (NBMA) are spearheading efforts to develop biotech crops in Nigeria and other nations. In other words, Cohen's claim that "multinational seed corporations" are pushing biotechnology into the developing world at the expense of "Afro-Indigenous agricultural knowledge" is simply false.

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Traditional and modern approaches to agriculture overlap in goals and methods.

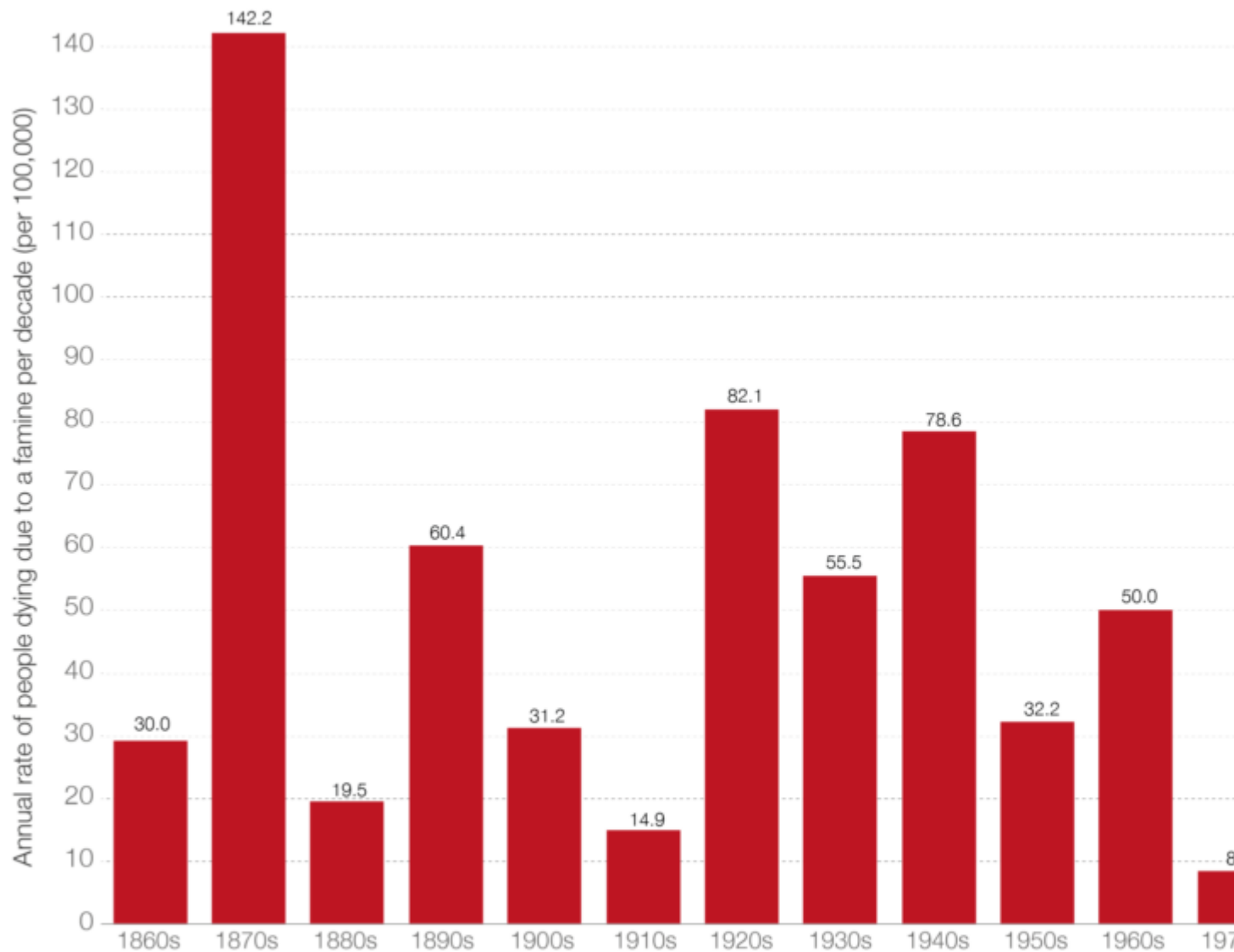
The reality is that crop research in developed countries is generally focused on the needs of farmers in those nations, Moses [has explained](#) elsewhere. The good news is that many developing countries are following the same strategy, investing heavily in biotech research that will benefit their farmers. If these efforts are halted, growers [will acquire](#) the enhanced seeds illegally—because they want them.

Some crop-improvement projects, Golden Rice being the most prominent example, [required the cooperation](#) of Western biotech companies. African farmers also grow “local” varieties of corn that [originated elsewhere](#) in the world, but so what? This isn’t “colonialism” in any meaningful sense. The better term to use is “trade,” which has a [long track record](#) of making the world wealthier.

None of this negates the historic evils of colonialism or excuses the misdeeds of powerful corporations and nations. But the narrative that paternalistic Westerners [have foisted](#) unwanted technologies on the

developing world is nonsense. It doesn't square with the facts and, more importantly, offers no serious solutions to the genuine problem of food insecurity, which [still affects](#) more than 700 million people worldwide. Instead of calling Western corporations "colonizers," let's feed more people however we can.

Annual rate of people dying due to a famine globally



Data source: The rate of the excess mortality due to famines shown here is presented in detail on OurWorldinData.org/famines [The dataset was compiled by OurWorldinData.org].
How the rate is calculated: The annual rate is calculated for each decade by dividing the total number of famine victims in each decade by the average population of the world in that decade, and then dividing the resulting ratio by 10 (and for the data from 2010 to 2016 it is divided by 7) to arrive at a yearly rate. To express it as the rate per 100,000 people, the resulting rate is multiplied by 100,000.
For famines that happened at the end of a decade and the beginning of the next decade the famine victims are split by decade on a year by year basis.
For famines for which different excess mortality estimates are published the midpoint between these estimates was chosen here.
This visualization is available at OurWorldinData.org. There you find the full dataset and more research and visualizations on famines and global development.

Deaths from famine have gone down substantially. There is still much work to do to ensure food security.

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