

# "No one is talking about food": making agriculture a "business" in Ghana

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#### **Abstract**

At the turn of the 21st century, a collection of donors created the Alliance for a Green Revolution in Africa (AGRA) to spark a "new" Green Revolution on the African continent. Since its inception, AGRA's mission has revolved around a series of interventions designed around the idea of making agriculture a "business." In this paper, I ask how AGRA puts such discourses into practice with a particular focus in Ghana. To do so, I draw on a television show produced by AGRA called *Kuapa*, organizational literature, and to a lesser extent, interviews, to assess how AGRA materializes its goals in Ghana. Ultimately, I argue that a focus on discourse not only provides insight into how AGRA conceptualizes agricultural transformation, but also how AGRA pursues agronomic, political, and social changes in the countries in which it intervenes.

Keywords New Green Revolution for Africa · Food Security · Development · Ghana · Critical discourse analysis

#### **Abbreviations**

AGRA Alliance for a Green Revolution in Africa
BMGF Bill & Melinda Gates Foundation

CSIR Council for Scientific and Industrial Research

LCIC Legacy Crop Improvement Centre

USAID US Agency for International Development WACCI West Africa Centre for Crop Improvement

#### Introduction

"People say Africa is the continent of tomorrow," says a woman, walking through a browning field with dark clouds overhead. "To me," she continues, raising her hands, gesturing, "this seems a lot like yesterday. But it doesn't have to be this way. Farming can be more than existence; it can be a business. We don't have to just survive, we can thrive.

The scene just described is the opening of a promotional video produced by the Alliance for a Green Revolution in Africa (AGRA; AGRA 2013). AGRA, created by donors in

Green Revolution to the African continent (Munro and Schurman 2022). These efforts are predicated on the idea that Africa was left out of the first Green Revolution. However, unlike the first Green Revolution, this "new" Green Revolution is modeled around the private sector, not the state, moving farming from an "existence" to a "business" (Moseley 2016). To do so, the video's narrator tells the viewer, "It's about seeing how it's all connected. We start with good seeds. We put good seeds into good soil. We use good knowledge to get good produce. And if we have good access to the market, we can sell it at a good price."

the early 2000s, is at the forefront of efforts to bring a "new"

Since AGRA's founding in 2006, the organization has worked towards operationalizing this idea of good seeds, good soil, and good markets through several programs geared at increasing the availability and use of "improved" inputs, chiefly seeds and fertilizers, and further integrating African farmers into regional and global value chains (Toenniessen et al. 2008; AGRA 2020b). One of AGRA's first countries of intervention was Ghana, where AGRA has allocated nearly \$60 million towards funding plant breeding projects, postgraduate training programs, farmer demonstrations, and the design and advocacy of new policy (AGRA 2017a; AGRA 2020a). In addition to carrying out initiatives, AGRA also plays "a mediating role between the government and development partners" (KIT 2020, p.

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13). And to be sure, the idea of a "new" Green Revolution has been embraced by those in governmental ministries as well as across non-governmental organizations (Rock 2022; Nyantakyi-Frimpong and Bezner Kerr 2015): the Ministry of Food and Agriculture established an "agribusiness unit" division in 2012; multiple administrations have passed seed and fertilizer policy reforms; and state intiatives seek to increase the use of certified seeds and chemical fertilizers. "With partners such as AGRA," former president John Mahama wrote, "we are beginning to change [the] perception about agriculture, and more people are getting into it as a business" (AGRA News 2015, p. 13).

Between 2015 and 2016 I conducted nearly a year of fieldwork in Ghana, examining how the "new" Green Revolution was rolling out in real time. Whether in meetings with officials or at workshops, I was continually struck by how often I encountered a version of Mahama's phrasing: "agriculture is not a way of life, it is a business." One day while chatting about agricultural development trends with the head of a farmers' association, they remarked, "everyone is talking about agribusiness now, no one is talking about food." This reflection revealed both a point of tension – between talking about agribusiness (now), not food – and an instructive point of departure, and I began to pay closer to attention to how discourse was playing a key part of sparking a "new" Green Revolution.

Discourse is not simply the way that people speak or write texts about the "new" Green Revolution, but rather, the ways in which speakers (or writers) harness specific images and ideas in support of achieving specific, material ends. Representations of farmers "are actively mobilized by other actors in support of their ambitions" and "reveal the political work that representations of the farmer do" (Beumer and Swart 2021, p. 4). The AGRA video, for example, presents a deliberate image of Africa: as the continent of "yesterday" - not "tomorrow"; as a place where farming is an "existence" - not a "business"; and as a place where people are "surviving" - not "thriving." As Aaron Eddens writes, such "geographical representations" are not necessarily factual statements, but instead, "are always both symbolic and material" (Eddens 2021, p. 76; Logan 2020). A critical eye to such discourse might ask how these representations are linked — symbolically and materially — to ideas of "good knowledge", "good seeds," and "good farmers" (Fairclough 2012).

To date, much of the literature on the "new" Green Revolution has assessed the project's epistemology and theory of change (Amanor 2011; Belay and Mugambe 2021; Clay and Zimmerer 2020; Eddens 2019; Luna 2017, 2020; McMichael and Schneider 2011), its history, actors and institutions (Munro and Schurman 2022), interventions (Moseley and Ouedraogo 2022; Schnurr 2019), and narratives (Alhassan

2019; Arora 2017). Less, however, is known about how specific actors, such as AGRA, operate on the ground (see Shilomboleni 2018 and Asuru 2017 for exceptions).

Thus, to assess how AGRA utilizes discourse to actualize its vision of a "new" Green Revolution in Africa, this paper asks: how are discourses "put into practice" and materialized by actors supporting the "new" Green Revolution (Fairclough 2012, p. 12)? In these processes, how does linguistic erasure work to transform certain categories as "normative" and "naturalized" (Bucholtz and Hall 2003, p. 372; Irvine and Gal 2000)? And what becomes masked – in terms of power, political economy, and epistemology – in this process (Pierre 2020)?

To answer these questions, this paper draws on *Kuapa*, a two season "edutainment" television show produced by AGRA, organizational literature, and to a lesser extent, interviews, to better understand how AGRA materializes its goals in Ghana. As I will show, *Kuapa*, which means "good farming" in Twi, was a platform not only for AGRA to demonstrate its ideas about "good farming," but also to showcase its ongoing investments in Ghana's agricultural, political, and educational sectors. Thus, an investigation of *Kuapa* coupled with an analysis of organizational literature provides deeper insight into how AGRA works in Ghana.

The remainder of the paper is organized as follows: first, I describe my methods and analysis of AGRA's work in Ghana, especially around how I conducted discourse analysis of *Kuapa*. Next, I delve into the literature on the "new" Green Revolution and AGRA specifically to frame the key debates around the group's vision and efficacy. With this groundwork in mind, the following section provides a general overview of agricultural development and modernization efforts in Ghana, with a special eye on AGRA's political, agronomic, and social work in the country. Following that, I analyze four epsidoes of *Kuapa* to demonstrate how AGRA materializes its vision for change in Ghana. Finally, I conclude with thoughts on the insights that discourse analysis provides in understanding how projects like the "new" Green Revolution unfold across time and space.

## **Methods**

The data presented in this paper are part of a larger research project that seeks to better understand how discourses of environment, agriculture, and sovereignty shape "new" Green Revolution efforts in Ghana. Ongoing since 2013, this project has included ethnographic fieldwork in Ghana (a total of 15 months), interviews with farmers, civil society groups, development professionals, and government officials, and collection of grey literature. While much of my research has focused on the inclusion of biotechnology in



the "new" Green Revolution (Rock 2022), I have also sought to understand the broader institutional contexts at work. As part of this, I identified key stakeholders, from development donors to farmer groups, and collected physical and digital materials, including flyers, pamphlets, videos, organizational reports, and blog posts. Materials produced by organizations are as much marketing tools as they are informational tools. They are how organizations seek to present themselves and their authority, shape discursive landscapes, and promote certain interventions. In total, these materials constituted a corpus of texts.

AGRA is unmissable when conducting research on agriculture in Ghana: as previously stated, they are a key actor driving efforts towards a Green Revolution in Ghana, working across policy, practice, and media spaces. Given their wide-ranging work, AGRA offers an opportunity to understand how development actors utilize discourse as a means of materializing their end-goals. To that end, AGRA was one of the main organizations from which I collected materials. In addition to gathering and assessing publications by AGRA, I also systematically watched, coded, and analyzed a television show they produced in Ghana called Kuapa. Kuapa was more or less formulated in the genre of reality makeover show: each episode would feature a farmer or group of farmers, whose farms would be assessed by experts who would in turn prescribe new technologies, inputs, and techniques to improve agricultural production, storage, and sales. This show constitutes the bulk of the data presented in this paper's analysis.

I was interested in how *Kuapa* conceptualized the ideas of a "good farming" and making agriculture a "business". Thus, I coded each episode with the following: name, gender, and location of farmer (or farmer group), the crop(s) of focus, how the farmer(s) described their farming challenges, how the show described the farmer's farming challenges, the expert, the interventions prescribed by the expert, and whether the expert was a partner of AGRA. I determined the latter by comparing each episode's experts against the corpus of organizational literature I had collected, such as the "AGRA Ghana Operational Plan 2019" (AGRA 2017a). Finally, I selected episodes that featured crops core to AGRA's larger investments – rice, soy, maize, and cowpea – for further analysis (AGRA 2017a).

I used tools of critical discourse analysis (CDA) to analyze both the corpus of AGRA institutional texts I had gathered as well as the *Kuapa* episodes. Critical discourse analysis "does not simply describe existing realties but seeks to explain them" (Fairclough 2012, p. 9). CDA draws attention to how "discourses may under certain conditions be operationalized, 'put into practice'," or in other words, "they may be physically *materialized*" (Fairclough 2012, p. 12). In this tradition, "discourse" is not simply words that

people write or say, but rather, something that acts as a vehicle for ideology and ideas about how the world should be.

Within my discourse analysis, I paid particular attention to erasure. Following Irvine and Gal, "erasure is the process in which ideology, in simplifying the sociolinguistic field, renders some persons or activities (or sociolinguistic phenomena) invisible. Facts that are inconsistent with the ideological scheme either go unnoticed or get explained away... Erasure in ideological representation does not, however, necessarily mean actual eradication of the awkward element" (Irvine and Gal 2000, p. 38). Erasure is a powerful device actors utilize to attempt to get their point across (although, as Irvine and Gal note, success is not guaranteed). One outcome of "simplifying the sociolinguistic field" through the masking of certain elements (Irvine and Gal 2000, p. 38) is the creation of "unmarked norm[s]" (Bucholtz and Hall 2003, p. 372). Bucholtz and Hall explain how this works linguistically: "when one category is elevated as an unmarked norm," through, for instance, erasure of "awkward elements," "its power is more pervasive because it's masked. By being construed as both powerful and normative, its special status is naturalized" (2003, p. 372). Thus, a focus on discursive erasure allows us to understand how actors seek to elevate certain ideas, technologies, and political reforms as normative and/or ideal. In doing so, a focus on *erasure* is instructive for not only understanding the linguistic and discursive practices of actors promoting a "new" Green Revolution, but also the material, socio-political, and economic realities that they seek to create. I will turn to this in the Discussion section below.

## A "long overdue" Green Revolution

In 2006, officials from the Bill & Melinda Gates Foundation (BMGF) and the Rockefeller Foundation met in Nairobi, Kenya, to discuss how the two organizations might work together to support agricultural transformation in Africa. During the meeting, officials took a field trip where Melinda Gates "walked through many rows of new maize hybrids developed by Kenyan scientists and then pronounced that the Gates Foundation was 'on board'" (AGRA 2017b, p. x). Certified seeds, hybrids like those Gates saw that day in Kenya and non-hybrids bred in certified labs, would be the cornerstone upon which the BMGF and Rockefeller Foundation would build their new initiative: AGRA (Toenniessen et al. 2008).

Inspired, in part, by Kofi Annan's vision of a "uniquely African green revolution" (Annan 2004), AGRA was

<sup>&</sup>lt;sup>1</sup> While the first Green Revolution has become almost an invocation for its proponents, Harwood (2018) argues that rarely are the same proponents able to draw concrete, policy- oriented lessons from it.

envisioned to represent a new type of development intervention: its staff were mainly African; it focused on "breed[ing] locally adapted seed varieties" (Munro and Schurman 2022, p. 29); and its interventions aimed to build the capacity of private sector actors and value chains instead of simply providing inputs to farmers (Holt-Giménez 2008). The idea of the "value chain" used by AGRA "refers to a chain of input suppliers, farmers, traders, agroprocessors, exporters, and others," and the notion that "by integrating farmers into these value chains, ... they will have better access to yield-boosting inputs and increasingly be able to sell crop surpluses for cash" (Moseley 2016, p. 184). The value chain is essential to, as the AGRA video in the Introduction outlined, AGRA's mission to transform African agriculture "from a solitary struggle to survive to a business that thrives" (AGRA 2020a). This "energetically proclaimed interest in treating African farming as a business rather than as a pro-poor development imperative," Munro and Schurman argue, "represented a significant re-orientation in the framing of African agricultural transformation" (Munro and Schurman 2022, p. 31–32).

Today, AGRA is headquartered in Nairobi, Kenya, its staff work around the continent, and it holds a nonprofit [501(c)(3)] status in the United States, where many of its key funders are based. At the time of writing, AGRA was working in eleven key countries with a focus on three key intervention types: "policy engagement and building state capacity for delivery[;] strengthening systems for scaling technologies[; and] partnerships for agricultural transformation" (AGRA 2020b). These areas of intervention are all in support of AGRA's overarching strategy of "inclusive agricultural transformation," which envisions countries moving from an agricultural sector dominated by a majority smallholder farmers to fully industrial economies (AGRA 2020b). Key to this transformation, AGRA and others argue, is what's known as the "agricultural exit" (Jayne and Sanchez 2021): when "labor starts to migrate out of agriculture as rural factor and product markets become better integrated with those in the rest of the economy" (AGRA 2020b). Thus, the agronomic change AGRA seeks to spark is intrinsically tied to economic and social change, and the goal of the "rural economy [being] urbanized and integrated ruralurban development occurs" (AGRA 2020b).

AGRA is one of many organizations working towards the goal of bringing a "new" Green Revolution to Africa. These efforts started in earnest in the 1980s with Sasakawa Global 2000, an initiative led by Japanese philanthropist Ryōichi Sasakawa, former US-president Jimmy Carter, and the "father" of the Green Revolution himself, Norman Borlaug, who sought to replicate Borlaug's work in Africa. The project worked in over a dozen countries, often partnering with local ministries of agriculture and scientific councils to

distribute certified seeds and fertilizers. But its coordinators soon found that simply providing a technology package of inputs to farmers was not enough to sustain yields or significantly improve food security over time (Sasakawa Africa Association 2022).

By the beginning of the 21st century, ideas around how to bring a Green Revolution to Africa had started to shift away from working with the public sector and towards working with the private sector. A number of initiatives – from the US Agency for International Development (USAID)'s Feed the Future campaign to the G8 New Alliance for Food Security and Nutrition - emerged, all under the banner of a "new" Green Revolution. Though these varying initiatives held different strategies, many oriented their work around private sector actors (McMichael and Schneider 2011; Moseley 2016; Ollenburger et al. 2019: 289). This focus saw the private sector as both an arena for intervention – e.g. donor-initiated technical support directed at bolstering agro-input suppliers, promoting seed liberalization laws, and actively organizing seed trader associations – as well as a collaborator for interventions – e.g. donors partnering with major multinationals, encouraging farmers to purchase inputs from certified dealers (rather than saving seed or purchasing from the market). Feed the Future, for instance, partnered with US companies, such as the Coca-Cola Company, General Mills, and McKinsey & Company, on food security initiatives (Feed the Future 2022). US officials considered Feed the Future to be a vehicle to pursue a "shared interest" held by the US private sector and the US government of global and domestic economic growth held (USAID 2018).

While the road to bringing a Green Revolution to Africa has been long, so have critical interventions by scholars and civil society organizations. Paul Richards (1985) and Sara Berry (1993) have pointed to the ways in which so-called development experts have consistently prioritized yield output over all else, despite evidence that farmers weigh many factors - including, but not exclusively, yield - when determining what to grow and how to grow it (Nyantakyi-Frimpong and Bezner Kerr 2015). Additionally, speaking to the "new" Green Revolution's emphasis on the private sector, critical scholars have questioned whether the market is an effective substitute for the state (Holt-Giménez 2008, p. 466). Some have questioned who drives the agenda-making around the "new" Green Revolution. To that end, Patel argues that "while smallholder farmers are asked to guide the second Green Revolution, it seems as if they are asked to do so in ways that conform to an agenda that has already been written" (Patel 2013: 39).

Other scholars have examined the outcomes of "new" Green Revolution-styled programs broadly (Gengenbach et al. 2018; Clay and Zimmerer 2020; Dawson et al. 2016). In



a study of value chains in Mozambique, Burkina Faso, and Côte d'Ivoire, Gengenbach et al. found that "farmers [were] recipients of, rather than active participants in, value chain construction," which resulted in "[vulnerabilities] to unexpected and unintended outcomes" (2018: 209). Meanwhile, in Rwanda, policymakers have mandated a "climate smart" agricultural intensification program, that includes, out of many things, a ban on intercropping (Clay and Zimmerer 2020). This type of model – which resulted in an overreliance on monocropping – not only overlooks farmers' strategies, knowledge, and desires (Clay and Zimmerer 2020), and has reduced farmer well-being (Dawson et al. 2016).

One way in which scholars have sought to better understand the broader political economic changes that "new" Green Revolution actors seek to materialize is through discourse analysis. Some have looked at the "competing narratives" of "new" Green Revolution actors and promoters (Scoones and Thompson 2011, p. 3; Arora 2017) while others have evaluated particular discursive themes. Shaw and Wilson analyzed texts produced by the Gates Foundation to argue that it utilizes Malthusian discourses to promote certain technologies and therefore "capital accumulation" (2020, p. 382). Abdulai (2022) used narrative analysis to argue that the "new" Green Revolution's emphasis on innovative technologies overlooks political-economic contexts that are essential to technological advancement. Others have shown how discourses around agricultural modernization can reflect racialized ideas of progress and environment (Eddens 2019; Luna 2017).

And then some scholars have examined AGRA. Matthew Canfield (2022) has asked how the "ideology of innovation" is materialized through agricultural development programs, mapping how AGRA works to strengthen legal mechanisms such as intellectual property rights in the name of boosting innovation. Some civil society organizations, such as the Alliance for Food Sovereignty in Africa, have argued that AGRA works "top-down" rather than in a way that is "democratic and responsive to the people" (Belay and Mugambe 2021). In terms of outcomes, an impact assessment authored by Timothy Wise (2022) argued that AGRA had fallen short on its goals for crop productivity improvement. Moreover, Wise's assessment found that in thirteen of AGRA's countries of focus, the production of non-intervention crops, including millet, tubers, and groundnuts, declined significantly. An official evaluation of AGRA's "Partnership for Inclusive Agricultural Transformation in Africa" program found that wealthy male farmers tended to be the key beneficiaries of AGRA's input adoption initiatives, despite a goal of reaching both male and female smallholder farmers (Mathematica 2021a, p. 40).

However, qualitative studies of AGRA's country-level work reveal more nuanced insights. In Mozambique, Helena

Shilomboleni (2018) found that farmers sought engagement in AGRA's projects to better access markets and value chains, economic opportunities that were otherwise largely difficult to access. Similarly, AGRA beneficiaries in northern Ghana reported improved yields and livelihoods from their engagement with AGRA projects (Asuru 2015), though many also reported frustration with AGRA's emphasis on input provision as opposed to infrastructural improvements and climate change adaption (Asuru 2017, p. 170).

To date, a large amount of the critical literature dealing with AGRA interrogates the organization's theory of change, philanthropic intertwinings, and broad intervention package. Less is known about how the organization actually works on the ground, with notable exceptions (Asuru 2015, 2017; Shilomboleni 2018). In the following section, I seek to address this gap by analyzing AGRA's work in Ghana, combining an analysis of its programs with an analysis of its discursive strategies to illustrate how AGRA sought to materialize ideas of "good farming" and making agriculture a "business" in everyday life.

## Making agriculture a "business" in Ghana

Agricultural development has long been a priority of the Ghanaian state, and imagery of "good" farming and farmers has long played a role in this. During the colonial era, for instance, initiatives aimed at growing a uniform and robust cocoa sector developed and distributed booklets and videos about a model farmer entitled *Kofi the Good Farmer* (Sumberg 2011). The use of Kofi the Good Farmer continued into independence (Blaylock 2020), as state policy emphasized "modernizing" the agricultural sector (Nyantakyi-Frimpong and Bezner Kerr 2015). This took the form of building infrastructure (e.g., roads, irrigation, and markets), increasing mechanization services (Amanor 2019), implementing state farms (Kunkel 2022), and increasing the availability and use of newer seeds and inputs (Nyantakyi-Frimpong and Bezner Kerr 2015).

Agricultural initiatives in Ghana greatly changed in the 1980s due to the introduction of structural adjustment policies (Amanor 2019). These policies mandated the state retreat from public sectors. In the state's wake, non-governmental organizations (NGOs) began to enter, unfolding across the countryside and taking up the mantel of agricultural development and modernization. One commercial farmer I interviewed, who is also an official within a farmers' organization, described structural adjustment as a moment of transition in how agricultural development was framed: "[during] structural adjustment program and we had to work with the World Bank and other development partners to make sure that we are able to promote agriculture



as a business, not as a peasant-something that you just produce for yourself." Examples of such initiatives abound. The Sasakawa Global 2000 program, for instance, distributed a package of a high-yielding maize called Obatanpa and chemical fertilizer, which resulted in a massive spike in maize yields (Nyantakyi-Frimpong and Bezner Kerr 2015). But markets were unable to accommodate these spikes, and cheap maize flooded the market, causing program leaders to pull back on input support (Rock 2022). Other initiatives have similarly had unintended consequences. Mechanized plowing services, for example, have led to an increased focus on commercial crops at the expense of food crops (Kasanga et al. 2018).

Today, agricultural development initiatives are mainly run through the Ministry of Food and Agriculture, its donor development partners, and hundreds of NGOs scattered throughout the country. If the era after independence was an era of agricultural modernization, the present era is that of commercialization. Programs such as USAID's Agricultural Development and Value Chain Enhancement project envision smallholder farmers to be "outgrowers" for larger "nucleus farmers," who provide inputs in kind and connections to value chain actors (ACDI/VOCA 2014). But as programs such as this attempt to re-shape the countryside, some have been met with resistance from those the programs target: farmers. Generations of failed development and agricultural modernization schemes have resulted in a deep skepticism of new initiatives framed around agriculture as a "business" (Rock 2022). To this point, Vercillo and Hird-Younger found that some farmers responded to commercialization initiatives by engaging in "subversive actions ..., such as refusing to pay back loans, side-selling crops, burning crops and weighting down produce with stones" (2019, p. 769).

It is upon this historical context which efforts like AGRA unfold. For the past decade and a half, AGRA has actively been working in Ghana, seeking to bring about agronomic, political, and social change. This change, an official close to AGRA's Ghana operations explained to me, is undergirded by three key objectives. The first, they explained, is "building capacities of the private sector and public sector to be able to come out with quality, certified seed." This has included funding the West Africa Centre for Crop Improvement (WACCI), a postgraduate research and training program at the University of Ghana; supporting the development of 45 new seed varieties; and partnering with the Africa Fertilizer Agribusiness Partnership to expand fertilizer sales (AGRA 2019).

The second aspect of AGRA's strategy was to lay the groundwork for the growth of a private seed sector through policy interventions related to seed and fertilizer laws (KIT 2020). "After trying to develop these varieties, after

doing all these things," the official explained, "if certain local or national policies are inimical to the technology you are promoting, then you will not get far." To illustrate, AGRA played an instrumental role in "the development and approval" of several policy instruments, including the Plants and Fertilizer Act, which granted allowance for seed and fertilizer companies to import product into the country (AGRA 2019, p. 25).

Finally, AGRA's work to transform Ghana's agrarian and political landscapes is tied to the organization's larger vision for social change: the eventual consolidation of the country's agricultural sector. To get there, AGRA envisions first needing to "[get] agriculture moving" by spurring "agricultural productivity ... and creat[ing] an income surplus for farmers" (AGRA 2020b). A key part of this, the official explained, was the adoption of new seeds:

"That's where *Kuapa* comes in...[To] really get [farmers to] adopt the type of technology we are promoting[,] it takes a very long time for them to shift, so we need to do a lot of things to change their behavior and all kinds of things. So, we use television as one of [the ways] to really influence them."

As the official mentioned, *Kuapa*, a television show that AGRA produced, was not just for entertainment; it was a key tool to materialize AGRA's vision of transforming agriculture "from a solitary struggle to survive to a business that thrives" (AGRA 2020a). Dissecting what this means is where critical discourse analysis comes into play.

## **Kuapa: good farming!**

From 2015 to 2017, AGRA served as the executive producer of *Kuapa*, "a 30-minute reality makeover show designed to create awareness of improved agricultural technologies among smallholder farmers" (Kuapa 2017). *Kuapa* aired twice weekly on GTV, and episodes were also uploaded onto *Kuapa*'s YouTube and Facebook accounts. The show, developed by Feed the Future, Ghana's Ministry of Food and Agriculture, and USAID, served to bring the "new" Green Revolution to screens across Ghana. In total, *Kuapa* ran for 26 episodes across two seasons. Episodes were filmed in seven of Ghana's ten administrative regions, and each episode followed a similar format: the show's hosts, Prince and MaEfia, would begin the episode by asking a farmer or a farmer association about their farm(s) and challenges they faced. Next, the hosts would invite an "expert" to meet



<sup>&</sup>lt;sup>2</sup> During the time *Kuapa* aired, Ghana was divided into ten administrative regions. However, a referendum held in 2018 redrew administrative maps, resulting in sixteen regions.

the farmer, provide advice, and demonstrate "good farming" practices. Depending on the episode, the expert may be a crop scientist from a public research institute or a private agrodealer. Episodes would usually end with a presentation of gifts, such as a bag of seeds, protective equipment, or a pressure sprayer, to the farmer, and a summary of lessons learned. To understand how *Kuapa* defined and materialized "good farming," I now will briefly summarize four episodes before delving into analysis.

## Cowpea in the Volta Region

The inaugural episode of Kuapa features Sam, a 69-year-old farmer who grew several crops, including cassava and cowpea, on a 10 acre farm in the Volta Region (Kuapa 2015). One of the episode's main areas of intervention is seed, after Sam tells the hosts that he buys his cowpea seed from the market. The intervention occurs with the introduction of the show's expert, the owner of M&B Seed Company. The first expert tells Sam he must discontinue using "local seeds": "the problem with that is that the yields are very low, and virtually you don't get anything at all from what you are doing... I would personally advise you never to go back to the market to buy seed." The expert instead encouraged Sam to purchase improved seeds, which he described as maturing and drought resistant. The expert assured Sam that if he bought improved seeds from M&B, they would supply brochures and information on when to plant, when the seed will yield, and how to care for the crop. The expert warned Sam that the seeds "[come] with a cost," but that if Sam plants improved seeds, "the breeding has been done in such a way that the yield will compensate for the cost... you will get three times the money you spent on your farm."

The hosts return to Sam's farm six weeks later, and meet a triumphant Sam. "All farmers within Ghana [should] go in for improved seed!" Sam says, citing a high cowpea yield, which the narrators say has tripled. It's unclear where this yield comes from, as the variety that the M&B owner recommended matured in 60 days, and it had only been six weeks. Nevertheless, MaEfia and Prince are happy.

In this episode, Sam's purchasing of seed from the market was an opportunity for *Kuapa* producers to introduce him to "improved" seeds by certified agrodealers (as opposed to market traders). The expert tried to impress on Sam that agriculture is changing. The expert's use of "previously" – "previously, we pick[ed] seeds from other farmers' farms" – designates a temporal rupture, the shift of agriculture from a way of life to a business. The expert's advice also speaks to a particular tension that repeats throughout the series: that of the market vs. The Market. "I would personally advise you never to go back to the market to buy seed" elevates agrodealers and certified seed companies, such as that of

the expert, as *the* legitimate source of seeds (e.g., The Market), while equating seeds saved or purchased from sellers at local markets with, "virtually you don't get anything at all" (e.g. the market). To emphasize his point, the expert tells Sam that improved cowpea seeds are early maturing and drought resistant; while this may be true of some seeds, it is not universally true. This point is not addressed in the episode.

The expert in this episode, M&B Seeds, is a grantee of AGRA, and had previously received a \$149,765 grant to "[improve] access to quality seeds of maize, cowpea, rice, and groundnuts for resource poor farmers in the Volta Region Ghana" (2009–2012; MOFA 2013). Given this connection, both M&B Seeds and AGRA have a vested interest in farmers like Sam and others turning away from the market and turning towards companies like M&B to purchase their seeds. As the next summary will show, this theme carries across other episodes.

## Soya in the Northern Region

Episode 3 of Season 1 follows the trials and tribulations of Nurudeen, a 27-year-old farmer in the Northern Region who had recently begun growing soya (Kuapa 2016a). Nurudeen tells the hosts he would like help with planting techniques and fertilizer use. As they talked, Nurudeen and *Kuapa*'s hosts stood in the middle of his soya field where plants were visibly starting to sprout. The episode's first expert – an agronomist from the Council for Scientific and Industrial Research (CSIR) – assessed Nurudeen's farm and tells Nurudeen and hosts that the land was not "uniformly" prepared; the plants were not "uniform" (she points out different heights of sprouting soya); the "right type of seed" were not used; and the soya was planted are too far apart.

After the consultation with the expert was finished, MaEfia introduced the episode's second expert, the owner of Heritage Seed Company. The second expert addresses Nurudeen's use of grain: "he's even fortunate that the plant population is so good. Under normal circumstances he would've had bare field if you use grain."

"Did you get your seed from the market?" the second expert asks Nurudeen, who nods in affirmation.

"That is it," the second expert declares, satisfied, "so thank your stars"

"But why should he use certified seed, what is the importance?" MaEfia interjects.

"Certified seed is so important," the second expert replies. "You know the characteristics of the plant variety: when to plant, the potential yield, when to



stop planting that variety... as it is now, with different varieties, one might mature before the other, so harvesting becomes very difficult."

The episode breaks, and when it continues Prince and MaEfia are standing with Nurudeen amidst green fields. The hosts commend him for a job well done, and the viewer is left to assume that Nurudeen followed the expert advice and planted certified soya.

Like the episode with Sam, this episode emphasizes the purchasing of seed from agrodealers, not from market sellers or from acquaintances. Though Nurudeen clearly had some success in planting soya, indicated by both his sprouting plants and the second expert ("he's even fortunate that the plant population is so good"), this knowledge and skill was overlooked to emphasize what he had done wrong. And similar to the episode with Sam, the second expert advising Nurudeen to purchase certified seeds, Heritage Seed Company, is an AGRA grantee (Ignatova 2015, p. 148), as well as a member of the Seed Trade Association of Ghana, which was established by AGRA and Feed the Future (Asare 2015). Thus, the episode operates in part as a showcase of AGRA's many investments in the sector. In some episodes, as the next two summaries will demonstrate, this included the promotion of AGRA-funded crop varieties.

## Maize in the Eastern Region

Season 2, Episode 4 begins with MaEfia welcoming viewers to the episode: "we are talking about maize. Join us as we share the experience of farmers in Begoro who want to make changes that will transform them from smallscale farmers—".

"- into successful and sustainable smallscale businesses!" Prince finished, enthusiastically (Kuapa 2016c).

Unlike the previous two episodes summarized, this one intervenes not with an individual farmer, but with a farmerbased organization, the Begoro Export Farmers Association. Seated under the shade of a tree, MaEfia and Prince ask the group what type of maize they grow. Almost everyone responded with Obatanpa, a certified, open-pollinated variety (OPV) of maize developed in the 1990s. Unlike other episodes where the farmer lays out their qualms with their farm, the farmers in this group explain they are largely satisfied with Obatanpa: they buy it from agrodealers, the variety "matures early," "the yield is usually plentiful," "it can withstand windy conditions," and its "high yield means we make profit". Though association members were largely happy with Obatanpa, they identified three main challenges: the presence of pests, lack of funds to purchase chemical inputs, and late arriving subsidies for inputs.

After hearing from the farmers, Prince tells MaEfia, "I think we should introduce them to hybrid seeds because they yield higher as compared to the open pollinated variety." In the next scene, a voice-over narration states that the farmers are "not aware of new improved hybrid maize seeds."

MaEfia and Prince introduce the episode's expert, the founder of Legacy Crop Improvement Centre (LCIC), who asks the farmers if they know of hybrid seed. Although the previous scene said the farmers were "not aware of new improved hybrid maize seeds," surprisingly, it turns out that several farmers were aware of hybrid maize.

"I've heard of it, but I don't know what it looks like or where I can buy it."

"I've never cultivated hybrid maize, but I've heard of it."

"I heard about it on radio, but I don't know how to buy it."

After hearing from the group, the expert makes a case for why they should switch to hybrid maize:

"we all know that Obatanpa is a good seed variety to cultivate. [But] Obatanpa or OPV seeds don't yield the uniformity in your harvest that hybrid seeds do. That's why we advise farmers to use hybrid seeds. Hybrid seed responds better to fertilizer application. Hybrid seed is resistant to diseases and to climate change. Whether it rains or not, you are always assured of harvest."

At the end of the episode, MaEfia gifts bags of fertilizer and a hybrid maize variety called Kpari-Faako to representatives from the FBO (CSIR-Savanna 2020 2). With a parting word MaEfia tells them, "don't re-use seeds from one planting for another season. Always buy fresh seeds for planting."

Similar to the previous episodes, members of the Begoro Export Farmers Association did not cite seed as an issue they faced on their farm. In fact, members of the Association were largely happy with their seed of choice (Obatanpa), and instead cited pests and access to cash and chemical inputs as their largest challenges. If the problem in the Nurudeen episode was that he was not using certified seed, the problem in this episode is that the farmers are not using good enough certified seed. Thus, this episode took on the task of attempting to convince an entire group of farmers to change seeds, and did so in two key ways. First, the episode described the farmers as "not aware" of hybrid seeds, when in fact many were. Secondly, the show's expert described hybrid seeds using broad strokes, describing them as resistant to diseases, climate change, and drought ("Whether it rains or not, you are always assured of harvest"). Like



any seed, hybrids are bred for specific traits, such as disease resistance. Climate change resistance is not a trait, but drought resistance is. But the expert – and *Kuapa's* producers – forgo these details, instead characterizing *all* hybrids as disease resistant, climate change resistant, drought resistant, and assured to yield.

Additionally, the seed provided to farmers at the end of the episode – Kpari-Faako – was developed by breeders at CSIR and funded by AGRA (AGRA 2017b). Moreover, the show's expert has a long history with AGRA. Before founding the LCIC, he worked at WACCI, the AGRA-funded crop improvement center at the University of Ghana. AGRA had also sponsored the expert to attend "a short course on hybrid seed production and seed enterprise management at the University of Nairobi, Kenya" (Wellard 2019, p. 57). From there, AGRA provided funds to start LCIC, and at the time *Kuapa* was filmed, LCIC was "the only private company in the country that is engaged in hybrid foundation seed production and marketing" (Wellard 2019, p. 57). Thus, *Kuapa* served as one means for promoting both a technology and a company that AGRA had invested significant funds in.

## **Rice in the Northern Region**

In Season 1 Episode 5, Prince and MaEfia travel to the Northern Region where they meet Idurisu, a 20-something who grew up farming with his parents and now has his own farm, including an acre dedicated to rice (Kuapa 2016b). Idurisu tells the hosts that he usually grows "local seeds", which he obtains from the market and friends, and chooses to use depending on the season. He also shares that he broadcasts seeds and fertilizer on to the field, a practice that he describes as "normal," one that he "learned from [his] parents," and one that his friends also use. Idurisu's major challenge, he tells the hosts, is that his rice yields are low. The scene changes, and a narrator begins to list "problems identified," including: "low yield; no knowledge of rice cultivation, seeds used or source of seeds; broadcasts both his seeds and urea fertilizer; keeps no records."

The hosts bring in two experts to help Idurisu. One, an agronomist from the CSIR, tells Idurisu about certified seed released by CSIR, including a variety called "AGRA rice," named after its funder and the executive producer of the show, AGRA. The second, an officer from the Feed the Future Agriculture Technology Transfer Program, demonstrates how to transplant – rather than broadcast – rice seedlings and fertilizer.

After expert advice on planting and fertilizing rice seedlings is given, the hosts return to visit Idurisu. Idurisu is happy and tells the hosts he has grown AGRA rice. The three of them stand smiling in a green field. The show ends a few minutes later, and MaEfia gives the last word: "one thing I know for sure is that if the farmer is poor, so is the entire country."

The episode with Idurisu stands out in its explicit dismissal of the farmer's knowledge and skill. When asked by the show's hosts what sort of seeds he uses, Idurisu listed different varietals and explained that he decides what to grow depending on the season. He also shared that he learns about seeds from family and friends, that he grew up farming with his parents, and that he purchases seeds from the market. But in turn, the narrator says Idurisu has "no knowledge of rice cultivation, seeds used, and source of seeds" (author's emphasis). This is a moment of literal and linguistic erasure (Irvine and Gal 2000, p. 38). In the previous scene, Idurisu demonstrated several social, economic, and knowledge networks that he had tapped into to better understand rice farming. In particular, he described multiple levels of knowledge, including seed sources, varieties, and intentional use (depending on the season and/or ecology demands). However, according to *Kuapa*, this is not only not "good farming," it also supposedly demonstrates that Idurisu has "no knowledge." Instead, experts from CSIR and Feed the Future are positioned as those with real expertise, and varietals such as AGRA rice as legitimate sources of seed. Here, erasure is working in multiple ways to elevate normative ideas of farming. I now turn to a discussion to place episodes findings in conversation with each other, and within broader political economic contexts.

#### Discussion

AGRA's goal of making agriculture a "business" in Ghana required farmers to adopt the seeds, inputs, and techniques the organization believed to be key to invoking widespread agricultural change. Taken as a suite, this change constituted "good farming," and thus AGRA sought out to transform Ghanaian farmers into "good farmers." To that end, *Kuapa* was a platform for AGRA to show off their grantees, seeds, and networks. But it also was an insight into the political economic change AGRA was working towards achieving, and the groundwork it had laid towards this goal.

To illustrate, AGRA's support of the Plants and Fertilizer Act revised national policy to allow the private sector, companies like LCIC, to get into the business of hybrid seed. Additionally, AGRA's funding of educational programs such as the WACCI at the University of Ghana is training the next generation of scientists and practitioners, such as the founder of LCIC, to work towards making agriculture a "business" through the development of hybrid and other types of certified seed. Examples of this seen in the show include the promotion of AGRA rice and Kpari-Faako cowpea, two crops developed at the CSIR through



funding from AGRA. And such seeds, along with fertilizers and other inputs, are distributed across national networks of private agrodealers and seed traders' associations, including Heritage Seed and M&B Seed, that AGRA has worked to develop and support (AGRA 2017b).

I share these connections not as criticisms, but rather, as an insight into both the interventions AGRA has made, and as a framework for understanding how *Kuapa* then serves to materialize the notion of making agriculture a "business." This is as much a material as it is an ideological process. *Kuapa*'s promotion of "improved" seeds, which are featured in over half of *Kuapa*'s episodes, is an example of this. In many of these cases, the show, not farmers, identified seed quality or availability as a challenge. This is one way that *Kuapa* engages in erasure: the insistence of new seeds *even* when farmers have not listed seed as an issue.

For example, in Begoro, a farmers' association expressed satisfaction with a maize varietal called Obatanpa, citing its yields, resistance to wind, and good profit margins. Since its introduction, Obatanpa has remained popular amongst Ghanaian farmers, who report consistent yields, little need for fertilizer, and the ability to harvest reproductive material to plant in future seasons (Amanor 2011; Poku et al. 2018; Ragasa et al. 2013). As scholars such as Paul Richards (1985, p. 123) have shown, for many farmers, consistent yields are often valued above *maximized* yields, as a means of minimizing risk. Despite this, the positive qualities and experiences farmers equated with Obatanpa were overlooked by the narrators, who instead emphasized that the FBO should know of hybrid seeds. And it turns out, many members of the FBO did in fact know of hybrid seeds, but this knowledge was literally erased by the claim that they were "not aware."

In *Kuapa*, key to the process of knowing is the introduction of the expert. In *Kuapa*, the "expert" is considered to possess the knowledge, "diagnoses, prescriptions and techniques" to not only address farmers' "problems," but also move the farmer and their farm away from "a way of life" and to a "business" (Li 2007: 7). The introduction of the

**Table 1** Kuapa and the business of making agriculture a "business"

Way of Life/Bad Farming	Business/Good Farming	Episode
Grain and seed obtained from market and friends	Certified seeds from certified agro-dealers	Begoro FBO, Nurudeen, Sam, Idurisu
Reusing reproductive materials	Buying new seed each season	Begoro FBO, Idurisu
Broadcasting seed	Planting in rows	Nurudeen, Idurisu
Unpredictable yields	Predictable yields	Begoro FBO, Nurudeen, Sam
Non-uniform plants	Uniform plants	Begoro FBO, Nurudeen
Open pollinated varieties	Hybrid varieties	Begoro FBO

expert – whether a certified private business operator or a plant breeder – as the one who possess the knowledge to solve a farmer's problem sets an unmarked norm (Bucholtz and Hall 2003, p. 372) of who is an expert and what type of knowledge counts as expertise. In *Kuapa*, a farmer is never "the expert," despite the fact that farmers possess key knowledge on "local ecological conditions, and the problems and opportunities posed by such conditions" (Richards 1985, p. 141). Thus, the expert serves as not only an epistemological boundary, but also a physical embodiment of the farming as way of life (farmer) vs business (expert) dialectic.

An example of this can be observed in the episode with Nurudeen, when one of the show's experts tells Nurudeen he's "fortunate that the plant population is so good" despite using grain. One of the show's hosts, MaEfia, interjects, and asks "why should he used certified seed, what's the importance?"

This interaction is a notable moment of tension, as the show's hosts and experts have to confront a reality that goes against the show's teachings: Nurudeen's plant population is "so good", *and* he used grain from the market. That's where MaEfia's interjection becomes essential, as it allows the expert to disregard Nurudeen's good plant population as lucky ("so thank your stars") – rather than skilled – and stress the importance of certified seed that the expert just happens to sell. This tension is also an example of how the show seeks to portray farming as a way of life (unpredictable, up to luck) versus a business (certified seed as uniform and predictable) (see Table 1).

Erasing farmers' knowledge and skill and instead characterizing as "luck" is not only a "scorn for practical knowledge," it is also a discursive means to elevate "the importance of the specialist and [their] institutions" (Scott 1998, p. 305). In the case of *Kuapa*, the erasure of farmer's knowledge serves to establish a particular type of agriculture as authority (through "expert advice"). This is done to persuade farmers to purchase inputs from The Market, rather than save, trade, or purchase seeds from "the market" – e.g. open-air markets. The latter are linguistically marked as equivalent to "no knowledge" and farming as "a way of life," and therefore "bad farming." The Market – usually portrayed as a certified seed dealer or company – on the other hand, acts as a place of expertise, an (un)marked norm of what "good" farming entails (see Table 1).

Kuapa advances The Market for at least two key reasons. The first is that the show exists as a platform to market AGRA's grantees and collaborators. And indeed, all but two episodes featured partners – including implementing partners and grantees – of AGRA. These relationships (and perhaps conflict of interests?) are not disclosed in the episodes. And it is not simply the private companies who stand to gain. Kuapa's producers, including AGRA and Feed the



Future, too must demonstrate to its funders that its interventions are successful; that farmers are adopting the technologies they invest in; and that their interventions are a good value for donor and taxpayer funds. In that sense, *Kuapa* served as an important tool for AGRA and donors alike to not only attempt to reach farmers, but also promote the products and businesses they have invested financial and technical resources in. *Kuapa* also promotes The Market as part of AGRA's larger goals of consolidating rural agricultural economies. This, the idea of the Agricultural Exit, requires small farmers and input dealers to gradually move out of their professions and into new ones. This is the ultimate goal of AGRA (AGRA 2020b) and *Kuapa* serves as one mechanism to move towards it.

## **Conclusion**

After Kuapa ended in 2017, Feed the Future published a project report with a claim that "6 million farmers were reached through radio and television broadcasts through the Kuapa television series" (2018, p. 47). However, a report conducted by an outside evaluator noted that "they did not come across anyone, extension agents, agrodealers, or farmers, who regularly watched the show. Only one or two had even heard of it" (Steffen et al. 2019, p. 110). Regardless of whether Kuapa achieved the aims of its producers, it still serves as an important text and piece of material culture through which to understand how actors materialize the notion of making agriculture a "business" in Ghana. Importantly, a review of Kuapa demonstrates the complexities of the larger "new" Green Revolution project at hand. As the literature has pointed out, agricultural transformation requires much more than a focus on inputs and productivity (Amanor 2011; Moseley et al. 2016; Richards 1985). In Ghana, where farmers have been at the forefront of agricultural modernization attempts for decades, the idea of making agriculture a "business" is not necessarily new (Rock 2022). Rather, farmers in Ghana have diverse needs, opinions, and knowledge, and their farming reflects as such.

Indeed, the same could and should be said for agriculture in Africa generally. And it is for this reason that some critique programs like AGRA for being top-down and unresponsive to diverse on-the-ground contexts (Belay and Mugambe 2021). This is evident in *Kuapa*, where enthusiastic hosts and producers seek to reorient Ghanaian farming towards that which meets the show's producer, AGRA, end-goals. And it is perhaps evident in recent evaluations of AGRA's work in Ghana and elsewhere on the continent, which show mixed results and shaky uptake of AGRA's interventions (Mathematica 2021a, 2021b; Steffen et al. 2019). Overall, a closer look at *Kuapa* demonstrates why

studies of agricultural development "practice" must include considerations beyond the farm-level, and the importance of considering the total agronomic, political, and social interventions at play. In the case of Ghana, AGRA's interventions have included the support of new seed policy and the development and distribution of new seed varieties, all in support of the alliance's goal of "inclusive agricultural transformation" which envisions some farmers leaving the sector all together.

Ultimately, AGRA's attempts to normalize and naturalize ideas of "good farming," while powerful, have unfolded unevenly. As this paper has shown, a close reading of *Kuapa*, triangulated with an analysis of organizational literature and interviews, provides clues into how and why: the provision of expensive inputs, the maligning of farmer knowledge and knowledge networks, and top-down interventions. For AGRA and its partners, these results suggest that future "good farming" interventions that do not place farmers squarely at the core of the design process risk failing their objectives, and the people they wish to serve.

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## References

Abdulai, A.-R. 2022. A New Green Revolution (GR) or neoliberal entrenchment in agri-food systems? Exploring narratives around digital agriculture (da), food systems, and development in Sub-Sahara Africa. *The Journal of Development Studies* 58 (8): 1588–1604.

ACDI/VOCA. 2014. Agricultural Development and Value Chain Enhancement Feed the Future activity (ADVANCE). Final Report, June 13. https://pdf.usaid.gov/pdf\_docs/PA00M99T.pdf. Accessed 18 January 2023.



- Alhassan, A. Y. 2019. Competing discourses of sustainability in African agriculture: A Case study of the sustainable agriculture discourse of the Alliance for a Green Revolution in Africa. PhD dissertation, Department of Sociology. Saskatoon: University of Saskatchewan
- Alliance for a Green Revolution in Africa (AGRA). 2013. AGRA story: The March towards a Green Revolution in Africa. https://www.youtube.com/watch?v=CM\_2FWzc3QU. Accessed 24 April 2022.
- AGRA. 2017a. AGRA Ghana operational plan. https://agra.org/wp-content/uploads/2018/01/AGRA-Ghana-Operational-Plans- 03.11.2017.pdf. Accessed 22 April 2022.
- AGRA. 2017b. Seeding an frican Green Revolution: The PASS journey. Report. Nairobi, Kenya: AGRA.
- AGRA. 2019. AGRA Ghana operational plan. https://agra.org/focus-countries/ghana/. Accessed 6 November 2022.
- AGRA. 2020a. AGRA in Ghana. https://agra.org/focus-countries/ghana/. Accessed 28 October 2022.
- AGRA. 2020b. Our strategy. https://agra.org/our-strategy/. Accessed 24 April 2022.
- AGRA News. 2015. A New Dawn for Inclusive African Agriculture. Issue 7.
- Amanor, K. 2011. From farmer participation to pro-poor seed markets. IDS Bulletin 42 (4): 48–58.
- Amanor, K. 2019. Mechanised agriculture and medium-scale farmers in northern Ghana: A Success of market liberalism or a product of a longer history? Agricultural Policy Research in Africa Working Paper 023.
- Annan, K. 2004. Secretary-General calls for 'uniquely African Green Revolution' in 21st Century, to end continent's plague of hunger, in Addis Ababa remarks. Press release, United Nations. https:// www.un.org/press/en/2004/sgsm9405.doc.htm. Accessed 22 April 2022.
- Arora, S. 2017. Configurations of agency and power in the academic discourse on the Green Revolution in East Africa. STEPS Working Paper 97.
- Asare, K. 2015. Seed association supports agric sector. The Ghanaian Times, June 25, http://www.ghanaiantimes.com.gh/seed-association-supports-agric-sector/.
- Asuru, S. 2015. The New philanthropy, poverty reduction and rural development: A case study of the Alliance for a Green Revolution in Africa (AGRA) in Ghana. *Journal of Government and Politics* 6 (1): 18–30. https://doi.org/10.18196/jgp.2015.0003.
- Asuru, S. 2017. The New philanthropy and smallholder farmers' livelihoods: A Case study of the Alliance for a Green Revolution in Africa (AGRA) in the northern region of Ghana. PhD dissertation, Faculty of Social Sciences. Bradford: University of Bradford.
- Belay, M., and B. Mugambe. 2021. Bill Gates should stop telling Africans what kind of agriculture Africans need. Scientific American, July 6. https://www.scientificamerican.com/article/bill-gates-should-stop-telling-africans-what-kind-of-agriculture-africans-need1.
- Berry, S. 1993. No condition is permanent: The social dynamics of agrarian change in Sub-Saharan Africa. Madison, WI: University of Wisconsin Press.
- Beumer, K., and J. A. A. Swart. 2021. Who is the African farmer? The importance of actor representations in the debate about biotechnology crops in Africa. *Journal of Agricultural and Environmental Ethics* 34 (1): 1–25. https://doi.org/10.1007/s10806-021-09841-8.
- Blaylock, J. 2020. The persistent instructor: 45 years of Kofi the Good Farmer in Ghana. *Journal of African Cinemas* 12 (1): 71–86. https://doi.org/10.1386/jac 00028 1.
- Bucholtz, M., and K. Hall. 2003. Language and identity. In A Companion to linguistic anthropology, ed. A. Duranti, 368–394. Oxford, UK: Blackwell.

- Canfield, M. 2022. The ideology of innovation: Philanthropy and racial capitalism in global food governance. *The Journal of Peasant Studies*. DOI:https://doi.org/10.1080/03066150.2022.209973
- Clay, N., and K. S. Zimmerer. 2020. Who is resilient in Africa's Green Revolution? Sustainable intensification and Climate Smart Agriculture in Rwanda. *Land Use Policy* 97: 1–2. https://doi. org/10.1016/j.landusepol.2020.104558.
- CSIR-Savanna Agricultural Research Institute. 2020. Stress Tolerant Top-Cross Maize Hybrids. Ghana: Report. Nyankpala.
- Dawson, N., A. Martin, and T. Sikor. 2016. Green Revolution in subsaharan Africa: implications of imposed innovation for the well-being of rural smallholders. *World Development* 78: 204–218. https://doi.org/10.1016/j.worlddev.2015.10.008.
- Eddens, A. 2019. White science and indigenous maize: The racial logics of the Green Revolution. *The Journal of Peasant Studies* 46 (3): 653–673. https://doi.org/10.1080/03066150.2017.1395857.
- Eddens, A. 2021. Securitizing the climate crisis: Racial geographies of empire and the agri-fintech frontier. *American Studies* 60 (3/4): 63–88.
- Fairclough, N. 2012. Critical discourse analysis. In *The Routledge handbook of discourse analysis*, eds. J. P. Gee, and M. Handford, 9–20. London, UK: Routledge.
- Feed the Future. 2022. Feed the Future partners in the United States. https://www.feedthefuture.gov/resource/feed-the-future-partners-in-the-united-states/. Accessed 16 January 2023.
- Gengenbach, H., R. Schurman, T. J. Bassett, W. A. Munro, and W. G. Moseley. 2018. Limits of the New Green Revolution for Africa: Reconceptualising gendered agricultural value chains. The Geographical Journal 184: 208–214. https://doi.org/10.1111/geoj.12233.
- Harwood, J. 2018. Another Green Revolution? On the perils of 'extracting lessons' from history. *Development* 61: 43–53. https://doi.org/10.1057/s41301-018-0174-5.
- Holt-Giménez, E. 2008. Out of AGRA: The Green Revolution returns to Africa. *Development* 51 (4): 464–471.
- Ignatova, J. 2015. Seeds of contestation: Genetically modified crops and the politics of agricultural modernization in Ghana. PhD dissertation, Department of Government and Politics. College Park: University of Maryland-College Park.
- Irvine, J., and S. Gal. 2000. Language ideology and language differentiation. In *Regimes of language: Ideologies, polities, and identities*, ed. P. Kroskrity, 35–82. Santa Fe, NM: School of American Research Press.
- Jayne, T. S., and P. A. Sanchez. 2021. Agricultural productivity must improve in sub-saharan Africa. *Science* 372 (6546): 1045–1047. https://doi.org/10.1126/science.abf5413.
- Kasanga, M., P. Andersen, D. Kpienbaareh, S. Mason-Renton, K. Atuoye, Y. Sano, R. Antabe, and I. Luginaah. 2018. Traditional agriculture in transition: Examining the impacts of agricultural modernization on smallholder farming in Ghana under the new Green Revolution. *International Journal of Sustainable Development & World Ecology* 26 (1): 11–24. https://doi.org/10.1080/13504509.2018.1491429.
- KIT. 2020. Ghana outcome monitoring report 2019, AGRA-PIATA programme. Amsterdam, Netherlands: KIT Royal Tropical Institute.
- Kuapa. 2015. Kuapa S01E1. Youtube, https://www.youtube.com/watch?v=xPcUptP0O-s. Accessed 25 April 2022.
- Kuapa. 2016a. Kuapa S01E3. Youtube, https://youtu.be/1kX26JZidqQ. Accessed 25 April 2022.
- Kuapa. 2016b. Kuapa S01E5. Youtube, https://www.youtube.com/ watch?v=yhFhosfGEdw. Accessed 25 April 2022.
- Kuapa. 2016c. Kuapa S02E4. Youtube, https://www.youtube.com/ watch?v=SYxkx0z81zo. Accessed 25 April 2022.
- Kuapa. 2017. Kuapa Good Farming. Facebook, https://web.face-book.com/KuapaGhana. Accessed 25 April 2022.



- Kunkel, S. 2022. Modernising the village: State farms, agricultural development, and nation-building in 1960s Ghana. Zeitschrift für Unternehmensgeschichte 67 (2): 219–244. https://doi. org/10.1515/zug-2022-0019.
- Li, T. M. 2007. The Will to improve: Governmentality, development, and the practice of politics. Durham, NC: Duke University Press.
- Logan, A. 2020. The scarcity slot: Excavating histories of food security in Ghana. Oakland, CA: University of California Press.
- Luna, J. K. 2017. Getting out of the dirt: Racialized modernity and environmental inequality in the cotton sector of Burkina Faso. *Environmental Sociology* 4 (2): 221–234. https://doi.org/10.1080/23251042.2017.1396657.
- Luna, J. K. 2020. Peasant essentialism in GMO debates: Bt cotton in Burkina Faso. *Journal of Agrarian Change* 20: 579–597. https://doi.org/10.1111/joac.12381.
- Mathematica. 2021a. Partnership for Inclusive Agricultural Transformation, final evaluation. Volume I final evaluation report. Washington, DC.
- Mathematica. 2021b. Partnership for Inclusive Agricultural Transformation, final evaluation. Volume II final evaluation report. Washington, DC.
- McMichael, P., and M. Schneider. 2011. Food security politics and the Millennium Development Goals. *Third World Quarterly* 32 (1): 119–139. https://doi.org/10.1080/01436597.2011.543818.
- Ministry of Food and Agriculture (MOFA). 2013. Update on AGRA programs and grants in Ghana. http://mofa.gov.gh/site/?page\_id=7588. Accessed 13 November 2022.
- Moseley, W. G. 2016. The New Green Revolution for Africa: A political ecology critique. *Brown Journal of World Affairs* 23 (2): 177–190
- Moseley, W. G., M. A. Schnurr, and R. Bezner Kerr, eds. 2016. *Africa's Green Revolution: Critical perspectives on new agricultural technologies and systems*. New York, NY: Routledge.
- Moseley, W., and M. Ouedraogo. 2022. When agronomy flirts with markets, gender, and nutrition: A political ecology of the New Green Revolution for Africa and women's food security in Burkina Faso. *African Studies Review* 61 (1): 41–65. https://doi.org/10.1017/asr.2021.74.
- Munro, W., and R. Schurman. 2022. Building an ideational and institutional architecture for Africa's agricultural transformation. African Studies Review 61 (1): 16–40. https://doi.org/10.1017/asr.2021.82.
- Nyantakyi-Frimpong, H., and R. Bezner Kerr. 2015. A political ecology of high-input agriculture in Northern Ghana. *African Geographical Review* 34 (1): 13–35. https://doi.org/10.1080/193768 12.2014.929971.
- Ollenburger, M., T. Crane, K. Descheemaeker, and K. E. Giller. 2019. Are farmers searching for an african Green Revolution? Exploring the solution space for agricultural intensification in southern Mali. *Experimental Agriculture* 55 (2): 288–310. https://doi.org/10.1017/S0014479718000169.
- Patel, R. 2013. The long Green Revolution. *The Journal of Peasant Studies* 40 (1): 1–63.
- Pierre, J. 2020. The racial vernaculars of development: A view from West Africa. American Anthropologist 122 (1): 86–98. https://doi. org/10.1111/aman.13352.
- Poku, A.-G., R. Birner, and S. Gupta. 2018. Why do maize farmers in Ghana have a limited choice in improved seed varieties? An assessment of the governance challenges in seed supply. *Food Security* 10: 27–46. https://doi.org/10.1007/s12571-017-0749-0.
- Ragasa, C., A. Dankyi, P. Acheampong, A. N. Wiredu, A. Chapto, M. Asamoah, and R. Tripp. 2013. Patterns of adoption of improved maize technologies in Ghana. International Food Policy Research Institute. Working Paper 36.

- Richards, Paul. 1985. *Indigenous agricultural revolution: Ecology and food production in West Africa*. London, UK: Hutchinson & Co. (Publishers) Ltd.
- Rock, J. 2022. We are not starving: The struggle for food sovereignty in Ghana. East Lansing, MI: Michigan State University Press.
- Sasakawa Africa Association. 2022. Walking with the farmer: The journey of the Sasakawa Africa Association since 1986. Tokyo, Japan: Sasakawa Africa Association.
- Scoones, I., and J. Thompson. 2011. The politics of seed in Africa's Green Revolution: Alternative narratives and competing pathways. *IDS Bulletin* 42 (4): 1–23.
- Scott, J. C. 1998. Seeing like a state: How certain schemes to improve the human condition have failed. New Haven, CT: Yale University Press.
- Schnurr, M. A. 2019. Africa's gene revolution: Genetically modified crops and the future of African agriculture. Montreal: McGill-Queen's University Press.
- Shaw, A., and K. Wilson. 2020. The Bill and Melinda Gates Foundation and the necro-populationism of 'climate-smart' agriculture. Gender Place & Culture 27 (3): 370–393. https://doi.org/10.1080/0966369X.2019.1609426.
- Shilomboleni, H. 2018. African Green Revolution, food sovereignty and constrained livelihood choice in Mozambique. Canadian Journal of African Studies / Revue Canadienne des Études Africaines 52 (2): 115–137. https://doi.org/10.1080/00083968.2018.1 483833.
- Steffen, M. M., F. Nyangara, and C. Longley. 2019. Mid-term performance evaluation of the Scaling Seeds and Technologies Partnership (SSTP) in Africa: Wave two survey report. Smallholder farmers' adoption of improved seeds in program areas. Washington, DC: ME&A, Inc.
- Sumberg, J. 2011. "Good farmers" in Sub-Saharan Africa: Evolving narratives. *Outlook on Agriculture* 40(4): 293–298. https://doi. org/10.5367/oa.2011.0067.
- Toenniessen, G., A. Akinwumi, and J. DeVries. 2008. Building an Alliance for a Green Revolution in Africa. Annals of the New York Academy of Sciences 1136: 233–242. https://doi.org/10.1196/annals.1425.028.
- U.S. Agency for International Development (USAID). 2018. Shared interest: How USAID Enhances U.S. Economic Growth. Report.
- Vercillo, S., and M. Hird-Younger. 2019. Farmer resistance to agriculture commercialization in northern Ghana. *Third World Quarterly* 40 (4): 763–779. https://doi.org/10.1080/01436597.2018.155207 6.
- Wellard, K., J. Onsando, H. Odame, D. Kambewa, R. Aidoo, P. Katic, D. Alemu, A. Sidibe, B. Bamanya, and O. Mponda. 2019. End of program evaluation for AGRA: Africa's seed systems programs. Evaluation Report: National Resources Institute, University of Greenwich.
- Wise, T. 2022. Failing Africa's farmers: An impact assessment of the Alliance for a Green Revolution in Africa. Global Development and Environment Institute Working Paper No. 20 01. https://axelkra.us/wp-content/uploads/2022/02/20-01\_Wise\_Failure-ToYield.pdf.

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