had included a conclusion, perhaps written by the editors, containing a comparative analysis of the case studies and therefore focusing on lessons learned from the book's content itself. In particular, it could have answered the questions laid out in the introduction: Why do donors support undemocratic regimes, and what are the results of this? Another lacuna is the lack of attention to the admittedly difficult question of policy implications and alternatives, particularly the question of what donors could or should do differently. In Cameroon, would it have been helpful for donors to apply more pressure on President Paul Biya, including by reducing or suspending aid? Would one expect the outcome to be better if, after clearly failing to promote political liberalization, donors chose to withdraw their support to the government of Rwanda? Would a reduction or suspension of aid to Ethiopia or Uganda truly have a strong negative impact on regional security, as those countries' leaders seem to have convinced donors?

My wish for additional content does not dampen my enthusiasm for this book. Each chapter makes an important contribution, which is often not the case in edited volumes. The book is also written in accessible language. Anyone interested in foreign aid, African politics, authoritarian regimes, or the international dimension of democratization will find it well worth reading.

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## GEOGRAPHY, ENVIRONMENT, AND DEMOGRAPHY

**Ruth Hall, Ian Scoones, and Dzodzi Tsikata, eds.** *Africa's Land Rush: Rural Livelihoods and Agrarian Change.* Woodbridge, Suffolk, U.K.: James Currey, 2015. xx + 204 pp. Maps. Tables. Figures. Bibliography. Index. Paper. \$34.95. ISBN: 978-1-84701-130-5.

Despite all the writing produced to date on large-scale land investments in Africa and elsewhere, there has been a great need for the detailed case study approach and the kind of integrated, informed assessment presented in this collection, *Africa's Land Rush*. Hall, Scoones, and Tsikata have compiled a set of equally rigorous analyses of large land deals across eight nations: Nigeria, Ghana, Ethiopia, Kenya, Tanzania, Malawi, Mozambique, and Republic of Congo. The authors, most of whom are based on the continent, carefully review for each country the political economy, historical context, and legislative framework of land transactions, and then analyze specific investments, examining the role of the state and international actors, local elites, investors, host communities, and vulnerable populations, including small-holder farmers, pastoralists, hunter-gatherers, women,

and youth. Although internal dynamics vary, discernable and somewhat predictable patterns prevail across many of these cases. These are probed in an incisive and comprehensive introduction by the editors, who question the restructuring effects these investments—whether failed or successful—are having on agrarian livelihoods in Africa.

The global land grab debate features one side valorizing the efficiencies of industrial agribusiness, and the other condemning resulting land alienation and disenfranchisement of African smallholder farmers and pastoralists. Yet as these authors show, contingencies and variables produce a spectrum of results not reducible to one or the other of these popular positions. Herein lies the value of this volume. Since transactions are often intentionally nontransparent, all the authors spent time on the ground collecting data through interview-heavy mixed methods. Differences and similarities across the case studies are revealed in a chart summarizing the key players (investors, level of state involvement), business models (plantation, nucleus + outgrowers, family farms), amount of land transacted (1,250– 200,000 ha.), terms of transaction (25-99-year leases), prior status of the land transacted (customary land tenure, former investment, state farm/ ranch), number of people displaced (0-25,000), post-investment land use (dairy farming, food crop production, biofuel production, ranching), and water access. Investments that can be viewed as somewhat successful (e.g., South African/British Illovu sugar estates in Tanzania and Mozambique) appear besides unqualified failures (e.g., biofuel investments in Ghana and Kenva, South African agricultural ventures in Nigeria and Congo, an Indian agricultural deal in Ethiopia).

The editors and authors seek answers to the following questions: Do large-scale investments benefit local communities through job creation and technology transfer as promised? Who benefits and who loses out? Are those who lose their land to make way for investors provided the chance to give free, prior, and informed consent? And are they compensated? Is production increased after the deals and are domestic or foreign markets targeted for their products? To what extent do foreign investors or the state finance the investment? Do these deals cause increased social differentiation and conflict? Do they adversely impact local food insecurity? When and how do local elites capture and monopolize benefits? Do nucleus/outgrower schemes yield greater local benefit?

In case after case, we find confirmation of many of the concerns raised by opponents of the land rush. Few jobs appear to be created, and when they are, it is not locals who typically are hired. In one egregious example from Ethiopia, 85.1 percent of an estate's workforce was hired from outside the region and only 14.9 percent from the villages hosting it. Technology transfer proves to be an illusory promise since, as the editors point out, "the capital-intensive monoculture plantation business model . . . is a production system incompatible with smallholder farming in that it uses technologies that cannot easily be adopted by local farmers because of costs and differences in the scale of operations. Also, the cash crops that are grown on commercial farms are often different from the staples grown by local farmers" (16). So, for instance, several of the cases explored are capitalizing on the current sugar boom and E.U. subsidization of non-E.U.-produced sugar for export to European markets (Tanzania, Malawi, and Mozambique), while other cases expose how investors fail utterly to understand local soil and climate conditions and need knowledge transfer from local farmers to succeed (Ethiopia, Congo, and Nigeria).

Food insecurity is on the rise in many cases. In Malawi, outgrowers are bound by contract to grow only sugarcane and use their profits to purchase food. But they are only paid three times a year, which requires super-human budgeting skills and creates shortfalls for smallholder farmers with less profit coming in. Wealthier farmers evade this regulation by having multiple plots and committing only some of their land to sugarcane production, thus preserving their ability to feed their families. So poorer farmers reliant on a single plot suffer the most. Tanzanian outgrowers similarly find it difficult to withdraw from monocrop sugarcane production and have suffered delayed payments and low prices due to high-level corruption and imports of cheap sugar. (Since the release of this volume Tanzania inaugurated a new president who has banned sugar imports to protect the local sugar industry, so this trend may be reversed. While benefiting the investors and outgrowers, local consumers have seen the price of a kilo of sugar rise four times the regular price, again complicating the easy equation of winners and losers.)

Victims of increased poverty and disenfranchisement are—not unexpectedly—smallholders, women, pastoralists, and youth. Pastoralists (in Kenya, Ethiopia, and Nigeria) are perhaps losing out the most, not only because of the loss of their grazing lands—which, as communal resources, are often the first to be targeted as "unoccupied land" ready for investment but also because privatization has made the water resources they formerly accessed for their herds off limits in new enclosures. Youth, too, are hard hit as land that could have been theirs in future allocations has now been given away to investors. And the feminization of poverty continues as the historical trend of cash crop production primarily benefiting men continues. History replays itself also in the revival of colonial-era investment strategies in Kenya, Malawi, and Congo, where former colonial estates or ranches have been re-privatized to new investors.

Basic questions remain concerning the overall value of these deals. In one Ethiopian case, smallholder farmers who had been growing the higher-value crop of teff (recently identified as a protein-rich, mineral-rich, weightreducing "superfood") were displaced by an Indian corporation growing the lower economic- and nutritional-value grain of maize. In only two of the thirteen cases is the land allocated fully utilized; for the vast majority, only a tiny percentage, if any, has been put into production. Lack of free, prior, and informed consent, and no compensation for those displaced, is the norm. In only a few cases have promised infrastructural improvements and community development projects from investors been actualized. And when benefits have been identified, they accrue not to host communities but to nearby towns that supply services and value-chain enhancements for the investments. Conflicts are on the rise seemingly everywhere, with often violent outcomes. Elite capture has been confirmed (by chiefs in Ghana, politicians in Malawi, wealthier farmers in Tanzania, to name but a few) and new elites among vulnerable populations (e.g., pastoralists) are emerging. And a shockingly large amount of domestic capital via state financing and tax exemptions is required to get many of these deals off the ground, belying the fundamental premise of "foreign investment."

In short, this volume presents data that should alarm anyone concerned with the future of agrarian livelihoods in Africa. The challenges to large-scale agribusiness ventures are far outnumbering the opportunities and promises that accompanied them. And those whose rights to their land and livelihoods are least respected by both state and society—pastoralists, women, smallholders, and youth—are taking the biggest hit.

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## SCIENCE AND TECHNOLOGY

Casper Andersen. British Engineers and Africa, 1875–1914. London: Routledge, 2011. Notes. Works Cited. Indexes. xxvii + 229 pp. \$150.00. Cloth. ISBN: 978–1848931183.

Literature in the history of science and technology in Africa has been growing slowly since around the 2000. Most work published since then has concentrated on single infrastructure projects and on showing relations between the colonial period, on one hand, and "Western" science and technology in various African contexts. Little has been done to examine the place of professionals and networks at both ends of the colonial world, in the metropolitan capitals and in the colonies. In this regard, the Danish historian Casper Andersen's *British Engineers and Africa, 1875–1914* stands out as a significant exception, not just in delineating imperial relations between Africa and Europe but also in the wider global history of imperialism in an age of science and technology.

This book presents an analysis of complex connections forged between British engineers and empire at home and abroad, and between individual engineers and the Institution of Civil Engineers (ICE) at a historic moment when the engineering profession began to make its mark in Britain's African colonies. Engineers became important actors in the modernization mission of the empire to the extent that some apologists of imperial conquest imagined replacing the *C* for "Christianity" in the mantra of