University of Sussex Research & Enterprise

Prompting policy against 'green grabbing' and in support of new sustainable agricultural practices



Research into African Dark Earths offers a sustainable indigenous alternative to the potentially 'green-grabbing' biochar industry and policy.

Research carried out at Sussex reveals how environmental green agendas and the phenomenon of 'green grabbing' are depriving people of land and rights, and thus questions new market approaches to environmental sustainability. Reported globally, this work has had a significant impact, prompting the UN and leading global conservation organisations to recognise and take steps to avoid this problem, while providing propoor, 'climate-smart' alternatives.

Overview

In recent years new 'green' markets have been developed to enable carbon and biodiversity offsetting and biofuel use in attempts to use market mechanisms to redress the environmental consequences of fossil fuel use and destructive development. These green markets now drive new global investments in forestry, conservation and much agriculture, but where does the land come from? When James Fairhead (Professor of Social Anthropology) and colleagues Ian Scoones and Melissa Leach at the Institute of Development Studies (IDS), drew together a collection of case studies for the Journal of Peasant Studies, they found that such investments regularly displaced the poor from their lands and circumscribed their rights.

Their analysis of the appropriation of land and resources for environmental agendas, dubbed 'green grabbing' revealed it to be a process of deep and growing significance that often produces poverty in its wake. 'Green grabbing' has its origins in wellknown activities of environmental displacement, for example, for parks or forest reserves. However, the new 'green' markets have brought new investors into this process. As nature becomes 'capital' there is increasing interest from pension funds, venture capitalists and commodity traders, from the mining, oil and gas industry, and from entrepreneurs and entrepreneurial non-profit organisations leading to new appropriations of land.

A subtle dimension to 'green grabbing' had become apparent to Fairhead while he led a large team of colleagues from Ghana and Cornell in the United States in researching Anthropogenic Dark Earth Soils (ADE) in West Africa. These soils are enduringly rich, and gradually develop near farming villages, even in very poor soils, when inhabitants deposit the wastes associated with indigenous domestic and farming practices. This leaves the soil rich in many organic and inorganic materials that enduringly improve soil quality. While these soils have been recognised in Amazonian Brazil, where today's farmers value ADE that was formed many hundreds of years ago by pre-Colombian inhabitants, the Sussex-led team hypothesised and then established for the first time the existence and significance of analogous soils for West African farmers, terming these African Dark Earths (AfDE).

The concern with 'green grabbing' derives from the fact that these soils are especially fertile, in part, because of their 'biochar' content. Biochar



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is charcoal produced by incomplete combustion of vegetation and when added to soils can help improve soil's condition whilst sequestering atmospheric carbon dioxide. What concerned Fairhead was that it is global interest in sequestering carbon and associated new carbon markets that now drive interest in biochar technologies. This potentially biases research, reducing interest in ADE to biochar, drawing attention away from the potentially greater fertility benefits of mimicking ADE. Moreover, by drawing attention away from AfDEs, carbon markets are threatening large-scale 'green grabs' for biochar feedstocks and land consolidation associated with economies of scale rather than building on more socially and ecologically appropriate AfDE practices. On the flip side, loud criticism of modern biochar technologies risks undermining advocacy for AfDEs.

Achieving impact

This research questioning the effects of new market approaches to environmental sustainability and drawing attention to 'green grabbing', has been reported globally, prompting the UN Expert Committee on World Food Security and leading global conservation organisations to recognise and take steps to address this problem. Through their work on AfDEs, Fairhead and colleagues provide a pro-poor, 'climate-smart' alternative to biochar that is already being mimicked by farmers in Ethiopia with plans for implementation in Sierra Leone.

The special issue published in the Journal of Peasant Studies in 2012 evidenced concerns noted by the **UN Expert Committee on World** Food Security that acknowledged how conservation policy generates strong pressures to set aside land for environmental concerns in ways that can be understood as a land grab. It also led to a major gathering in 2013 on 'Conservation and Land Grabbing: Part of the Problem or Part of the Solution?'. Organised by the International Institute for Environment and Development, the International Land Coalition, the Zoological Society of London and Maliasili Initiatives, this conference brought together many international conservation agencies (the UN Environment Programme, the International Union for Conservation of



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Nature and the UK's Department for International Development, amongst others) and the national conservation organisations of Ethiopia, Uganda and Kenya.

Subsequently, initiatives that specifically address this newly recognised problem have arisen, including calling for deliberation and resolutions to avoid and correct conservation-led land grabs at the World Parks Congress (2014). The policy impetus is due, in part, to coverage by major international news organisations (eg New York Times, Al Jazeera) and activist news outlets (Europe-Solidaire, Global Justice Ecology Project), with further discussion and dissemination through leading professional and policy networks and lobby groups.

Research into ADE offers a sustainable indigenous alternative to the potentially 'green grabbing' biochar industry and policy. To develop global reach, Fairhead set up a collaborative research team that includes worldleading biochar soil scientists at Cornell University, including Johannes Lehmann (co-founder and chair of the International Biochar Initiative). In doing so they generated an immediate policy and business audience and were able to integrate AfDE research within partnerships between Cornell and African agronomic research and development. The AfDE research team have initiated a vibrant dialogue concerning AfDE within biochar networks and collaborations that cross soil-science and agricultural-policy communities in Africa and beyond.

Future impact

This work has prompted a leading African-based research programme in Ethiopia to switch their initial focus on biochar and adopt AfDE as their model, developing practices to mimic/ accelerate AfDE formation. Pilot trials conducted in 2012–13 are now being expanded into major regional trials in Ethiopia, and provide a model for an AfDE-inspired 'indigenous fertiliser' movement on the continent.

Funding and partnership

Research initiatives on ADEs were funded by grants from the Leverhulme Trust (The Dark Earth Phenomenon: Sustainable Agriculture for Amazonia and Beyond?) and ESRC (Amazonian Dark Earths in Africa?). Research on ADEs in Africa was conducted by James Fairhead and James Fraser at Sussex, Melissa Leach at IDS, together with international co-investigators, Kojo Amanor in Ghana, Dominique Millimouno in Guinea, and Johannes Lehmann and Dawit Solomon at Cornell (USA).

Working with us

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