

Introduction: biofuels, food security and land grabbing in Africa

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Introduction

Land grabbing for growing biofuels and to ensure food security is capturing the imagination of multilateral institutions, donors, non-governmental organizations (NGOs), land activists, academics and the media worldwide. The subject has also become popular on e-discussion fora, in the electronic and print media, at regional and international conferences and at workshops. In the last few years, climate change, peak oil and rising food prices have made energy and food security the primary global political issues. This has spurred the search for alternative renewable energy sources and has resulted in a global push for biofuels from various agricultural feedstocks, as well as for land in order to enhance food production and food security. This development has generated new frictions and tensions both globally and within African societies (Borras et al. 2010). Active resistance to land grabbing for biofuels and food for export is growing among those local communities in the South that are affected, among NGOs and among concerned researchers in the North and South (see the Declaration of the Harare Conference of 24–25 November 2010). The resistance to land grabbing is affecting moral, economic and political relations between and within nations, classes and communities both inside and outside Africa.

Land grabbing has acquired various definitions, reflecting the positions of players globally. The term ‘land grabbing’ has gained popularity, alongside a plethora of terms such as ‘green colonization’, ‘new land colonization’, ‘climate colonization’ and ‘water plunder’ (see chapters 1 and 7). In the African context, we find land grabbing to be a more useful and generic concept, which we define to include exploration, negotiations, acquisitions or leasing, settlement and exploitation of the land resource, specifically to attain energy and food security through export to investors’ countries and other markets. This does not preclude land grabbing by domestic or regional commercial, state and other interests; however, the major tendency is for these domestic interests to be in collusion or alliance with external interests, often through minor share holdings in local companies so that legal and other regulatory aspects can be

circumvented. In this context, the implication is that local people and producers have to contend not just with external, but also with domestic interests.

The significance of the concept thus also needs to be seen in relation to the 'unsettled' character of the governance structures of African land ownership, and to control of and access to natural resources. As a result, the roles, legitimacy and stakes of different actors, including the state, are contested. Land grabbing in its wider sense thus relates to changing access to, and control, use and ownership of, African land and the products generated from it, including what happens to them on the domestic and export markets. The actual process by which land is 'grabbed' by foreigners ranges from outright 'illegal' acquisitions, based on secretive negotiations, to rapidly concluded binding contracts that, though legal, are characterized by a strong asymmetry in power relations, by risk taking and by limited access to information, particularly among the weaker stakeholders, who are potentially most affected by the deals.

As a preamble, this chapter examines the complex aspects of biofuels, food security and land grabbing in Africa, as the continent competes for investments at a time of global economic recession. Peak oil and climate change have led to a resurgence of the search for alternative fuel, as well as to varying and competing discourses on climate change and on ways of mitigating it. This has generated fresh debates (and revived old ones) about the place and the role of Africa in international and global developments. The debates are expanding, as critics level the charge that 'rich countries are buying poor countries' soil fertility, water and sun to ship food and fuel back home, in a kind of neo-colonial dynamic' (Leahy 2009).

Multiple pressures towards commercialization of land in Africa converge – both historical and current – and these need to be differentiated and contextualized in relation to the recent wave of land grabbing. The concession of large areas – often as part of wider agreements for investment in infrastructure, the provision of services and job creation, as part of economic growth and the 'development' of Africa – motivated the authors of this book to present an in-depth analysis based on current research and informed observations of what is happening in Africa. As we observe and seek to understand the features and mechanisms of land grabbing and the initiatives at the international level to develop voluntary guidelines to 'do it right', we gain fascinating insights as to how Africa and the African rural population and smallholders are perceived by investing countries, international institutions and even external research communities. Our opinion is that Africa requires investment in many areas (economic, infrastructure, institutional and social) for the benefit of its people. The key question is whether land grabbing and the associated agro-investments can contribute to the development of Africa in such a way that benefits its people, or whether it will lead to their further impoverishment.

Unmasking land grabbing in Africa

A general theme running through most of the recent publications on land grabbing in Africa is that it is an integral part of the rise of commercialization within the context of globalization. The widespread view is that it is the West, with its strong, market-based economies, that forms the base for land grabbing, while the East is also angling to derive benefits from African land. The pace, intensity and secrecy have caused international concern and outcry, but there have also been local protests on different scales. A wave of press reports illustrates the magnitude of these trends, and a recent World Bank report (2010: vi) showed an annual average of less than 4 million hectares of land being sourced before 2008, as opposed to 45 million hectares in 2009. At least 70 per cent of this land was sourced in Africa. Nevertheless, in only 21 per cent of the deals announced was there any activity or implementation. The large gap between reported deals and activity on the ground in 2009 (World Bank 2010) indicates both that land grabbing-related projects have a long gestation period and also that projects (at least in the early phases) may end in failure (see Chapter 6). This does not, however, undermine the conclusion that land grabbing today is a significant and accelerating process that needs to be understood deeply from various angles and perspectives. The World Bank's conservative estimate is that 6 million hectares of additional land will be brought into production each year until 2030, and that: 'Two-thirds of this expansion will be in Sub-Saharan Africa and Latin America, where potential farmland is most plentiful' (World Bank 2010: xi, xvi, table 2). In this book, we aim to provide an African perspective on land grabbing, with reference to the globalized system of exchange and production in food and energy that is being shaped by the failed neoliberal history and agenda for Africa of the 1980s and 1990s.

In our search to understand the original motives for seeking out African lands, we are reminded of the unpleasant history of land takeovers and the colonization of Africa by Western nations aspiring to create empires. The contemporary land-grabbing process in Africa matches this history, insofar as it constitutes an increasing control over the benefits of Africa's land resources, ecology and water by non-Africans. The similarities between the colonial historical legacy and the key issues that arise from the current land-grab discourse are remarkable. The implications of land takeover involve political absorption, economic change, redirection of societal change and social dominance. Land grabbing is a response to the insecurity and vulnerability generated by the liberalized – and increasingly global – agro-food, fuel and financial systems. On the other hand, foreign investments in African land force certain social categories to the periphery of the economic system. In Africa, land is a resource that engenders phenomenal power, and the current land grabbing can contribute to processes of discrimination and marginalization that are similar to the dislocations during the colonial period.

Borras et al. (2010: 575) state that the starting point for understanding land grabs is 'who owns what? Who does what? Who gets what? And what do they do with the surplus wealth?' Anuradha Mittal (2010: 3) adds: 'What is grown? For whom? And how?' In our view, wealth and power are shaping global systems of production and exchange, as is demonstrated by the current biofuel investments in Africa. Over the last decades, there has been growing technological confidence in the West related to the exploitation of agricultural feedstocks for energy, but also for supplying food to Western and Asian markets and nations. Modern technology is contrasted with the simple techniques of a barren and poverty-stricken African agriculture. On this basis, it is easy to argue that Africa requires foreign investment as a shock therapy to modernize its agriculture and speed its 'development'.

In the rush for African land and biofuel production, non-African nations have given themselves the role of bearers of the right scientific and engineering approach. This perspective is obsessed with large-scale monoculture production systems that use advanced machinery to harness Africa's 'nature'. The perception of a barren Africa reconceptualizes the image of colonial Africa held by Sir Charles Eliot, Commissioner of the East Africa Protectorate:

Nations and races derive their characteristics largely from their surroundings, but on the other hand, man reclaims disciplines and trains nature. The surface of Europe, Asia and North America has been submitted to this influence and discipline, but it has still to be applied to large parts of South America and Africa. (quoted in Mackenzie 1997: 216-17)

Contemporary land grabbing is shrouded in similar attitudes about unexplored, underutilized and uninhabited African land. This echoes in a subtle way the past colonization of Africa. Worse in the current context, however, is the existence of willing participants on the African side who negotiate concessions with foreign interests under a veil of secrecy, and often in alliance with domestic actors. It has been noted that there are no proper guidelines or policies on land transfer processes in most African countries, and that investors take advantage of this lacuna, and of weak land governance, in what the World Bank terms 'a race to the bottom' to attract investors (World Bank 2010: xv). The purveyors of the land sales are the people, whose stand Frantz Fanon (1965: 38-9) described thus:

at the beginning of his association with the people, the native intellectual overstresses details and thereby comes to forget that the defeat of colonialism is the real object of the struggle ... The people on the other hand, take their stand from the start on the broad and inclusive positions of the Bread and the Land: how can we obtain land and bread to eat? And this obstinate point of view of the masses, which may seem shrunken and limited, is in the end the most worthwhile and most efficient mode of procedure.

The voice of the African policy-makers caught unaware has provided mixed signals as to their understanding of the land-grabbing phenomenon. Some actually believe that in their own countries there is 'too much land' for the size of the human population. They do not find it problematic to cede some of it to foreign investors, arguing that their countries need agricultural investment (capital) more than this land, which is assumed to be underutilized. This time, in biofuel-associated land deals, unlike during colonial times, the voice of African policy-makers can be heard from time to time. However, the weapons employed in land conquests have changed: the struggles take place in corporate boardrooms and on stock markets, rather than through physical war, as in the pre-colonial and colonial periods. In what seems to be justification for land acquisition, Palmer (2010: 5) has catalogued a series of self-serving statements from Africa in support of biofuels and land acquisition:

Mozambique's Minister of Energy, Salvador Namburete, for example, stated that '36 million hectares of arable land could be used for biofuels without threatening food production, while another 41 million hectares of marginal land would be suitable for raising jatropha'; Zambia's Minister of Agriculture, Brian Chituwo, boasted 'we have well over 30 million hectares of land that is begging to be utilised'; while his counterpart in Ethiopia, Abeda Deressa, suggested that pastoralists displaced by land grabbing 'can just go somewhere else'.

Yet in Africa there are also voices that have taken a cautious approach, given that many governments see foreign private investment as a panacea for economic development (Chapter 4). At this stage, one gets a sense of leadership inaction, as responses have come from lower-ranking government officials. In addition, there are no specific policy positions emanating from regional and continental bodies on land-grabbing policy. It is clear that if land grabbing is to be stopped, or even if it is to be channelled to the benefit of rural people and African smallholders, there is a need for towering leadership in Africa that can see beyond the 'guided' optimism.

The narratives of Western colonialism convey a message that foreigners take out more than they give Africa, especially in relation to resources. Whereas in colonial times it was about people being settled, today it is about machines on large-scale monoculture farms displacing African smallholders. A new form of 'settler' society is being created, which is not numerically dominant but which uses wealth and money to transform Africa's agrarian spaces. The issue of local benefits persists in the arguments of advocates for biofuels. However, the cases offered in this book, apart from in the chapter on Ghana (Chapter 8), demonstrate promises yet to be fulfilled in terms of employment creation, infrastructure, higher standards of living, etc. In the colonial period, these promises of 'civilization' for Africa resulted in an exclusive benefit for

the colonizers that created structural tremors of conflict in Africa which are persisting to this day.

The drivers and face of land grabs in Africa

The companies investing in large-scale land acquisitions are the products of complex social forces in their own countries (or sometimes transnationally); but Africa has only partial and fleeting glimpses of these social forces, made up of complex interests of transnational companies, governments under pressure to supply cheap food and politicians willing to satisfy affluence by approving policies that can damage other nations and people. Such companies as D1 Oils, Daewoo and SEKAB, identified by the media for land grabbing in Africa, are part of a complex social and political web, in which capital and the forces behind it shape global policy paradigms exemplified by biofuels and the search for food security. At this juncture it is easy to get a generalized description of what they do in Africa, but some of the descriptions are aimed rather at hiding than at revealing the true nature of the companies (Chapter 6). In addition, many companies adhere to proper and accepted ethical and moral values in their operations in the North, and in so doing retain their prestige and standing; in the South, though, including in Africa, this is generally not considered necessary.

It is difficult for Africans to understand the private-sector biofuel companies – not just because of their secrecy or ‘hidden agendas’, but also because their ideological and philosophical orientations are the products of complex historical forces within their own countries. The four hundred years of Africa’s association with the West has been shaped by a history of resource plunder. And in colonial times that plunder was at the behest of private companies. Palmer (2010: 1) illustrates this history:

the motives of those who joined the Company’s invading Pioneer Column in 1890 were unambiguous: ‘the main reason we are all here is to make money and lose no time about it’.

Whereas in the colonial period private companies were blunt about their intentions, this is not so in the current discourse. A view that Africa badly needs investment and that foreign aid has largely failed seems to imply that foreign companies should have unfettered access to Africa (Chapter 4). In the colonial period, European governments were ‘reluctant to spend large sums of tax revenue on the conquest and administration of tropical lands’ (Palmer 2010: 2). Yet nowadays governments that worry about the sustainability of development aid tacitly encourage private companies to invest in Africa’s lands. Under this arrangement, multiple benefits are envisaged: reduced foreign aid and thus reduced taxation of their own people, plus food and energy for the European and Asian markets.

However, when we look at the private companies that are taking over land in Africa, who are they and what are they doing in Africa? Public understanding of these issues seems to be both superficial and uncritical. Are they the forerunners of the real ‘scramble’ for Africa in a global contest where new forces (China, India, Brazil) are emerging to seek a stake in the African land? The companies at the forefront of investment in Africa are secretive. In Africa, very little is known about them, their linkages with their governments and their direct and indirect ‘control’ of markets. Much of the criticism in this book stems from this very opaqueness, which fosters suspicion. The generally hospitable and welcoming culture of Africa has been exploited by these companies. Yet, they are unaccountable and are under no public scrutiny in terms of their history, their operations, or their linkages and alliances.

The private sector in Western countries has largely been in favour of biofuels, stressing the energy and climate benefits that accrue from reducing a country’s reliance on oil. At the same time, some governments support biofuels because they are regarded as ‘strategic’ in terms of energy security and of reducing the cost of oil imports. A huge campaign to promote clean and renewable energy is also seen as a direct contribution to reducing the emissions of greenhouse gases. In developing countries, it is argued that biofuel production is likely to lead to income generation, to the creation of jobs, the promotion of trade and industry and to alternative domestic uses for crops that may not be absorbed by global market competition.¹ In September 2007, the managing director of the Ouagadougou-based International Institute for Water and Environment Engineering, Paul Ginies, concluded that: ‘No matter what we say, today biofuels represent a pragmatic solution in light of the energy problems in relation to soaring oil prices’ (Hien 2008).

Myths about land availability in Africa

Large-scale land grabbing has led to a renewed academic interest in struggles and conflicts around land in Africa (Cotula et al.; 2008a Cotula et al. 2009; World Bank 2010). Whereas current studies have looked at continent- and country-wide tendencies, the global-level analysis strips them of much of their content and nuance and mutes realities at the micro level. This book responds directly to this gap by providing national and micro-level cases on the complex impact of land grabbing for biofuels in Africa.

Africa’s land question cannot be understood on the basis of the mistaken perception that the continent has abundant land resources that are either not utilized or else are underutilized (Cotula et al. 2009; also see Chapter 1). In terms of the agrarian basis of the land question, it is notable that the extent of developed arable and irrigable land available for agriculture is limited, despite the continent’s large size. In general, there is apparent consensus on the centrality of land to African livelihoods, and the dismantling of colonial

rule in Africa was about redressing the skewed land ownership patterns inherited from colonialism. In some countries, the efforts to address imbalances in African land ownership through land tenure reforms, land redistribution and land restitution have failed to improve the land situation, which remains distorted in favour of big commercial interests. This implies that agricultural support (subsidies using finance or inputs) is also skewed towards the large-scale commercial sector, rather than smallholder farmers (Lund 2001).

One key argument for biofuels is that such production will occur on 'marginal' rather than prime agricultural land (Cotula et al. 2008a; 2008b). It has been indicated that in Africa, unforested marginal land amounts to 154 million hectares (ibid.). Meanwhile, the growing evidence on the subject raises doubts about the concept of 'idle' land. According to Dufey et al. (2007), in many cases lands perceived to be 'idle', 'underutilized', 'marginal' or 'abandoned' by government and large private operators provide a vital basis for the livelihoods of poorer and vulnerable groups, through arable crop land, grazing areas, and ecosystems with a variety of biodiversity resources (ibid.; see also Chapter 1). In Africa, livestock production forms the backbone of the rural economy in the agriculturally marginal areas (Engström 2009).

Even though the policy preference (where policies exist) is to plant crops aimed at producing biofuels on marginal lands, many land deals in Africa relate to fertile lands. The 'modern-day' land question is characterized by extensive degradation of fragile land resources and by increasing elite control of the prime lands through exclusion from the land of the majority of its former users and rights holders. In practice, no profit-driven investors would target marginal and degraded land. Instead, they would aim for fertile land, since there is a higher probability of making a profit that way than if they were merely 'environmentally sensitive'. For instance, in Ethiopia the spatial distribution of land deals shows a concentration in regions with more fertile lands and/or closer links to markets (Cotula et al. 2009).

In Tanzania, sugarcane plantations for biofuel in the Bagamoyo and Rufiji districts (Chapter 6) aim to draw water from the adjacent Rufiji River. In the Bagamoyo case, smallholders were using some of the project land for rice production and other parts were used for grazing by pastoralists, although formal ownership of the land is with the government of Zanzibar. In Rufiji district, some of the planned biofuel plantations were located in wooded areas, in forest reserves or on village land designated for food production (Chapter 6). Other ongoing or planned large land allocations in Tanzania have been reported as involving the displacement of local farmers (ABN 2007).

Africa's challenge today lies in the fact that the conditions of poverty and the increasing conflict levels are largely a result of limited access to natural resources, including agricultural land, pasture and water. In the post-independence era, many African states have generally failed to redistribute

land or to protect the rights of the indigenous communities in the face of competing interests for land from foreign investors (as well as from domestic interests). These weaknesses have contributed towards the general failure of African states to effect sustainable natural resource exploitation policies that benefit the majority of their populations.

The African crisis has historically been one of the ‘reproduction of labour’, i.e. social relations and the forms of organization of agriculture, and its contribution to livelihoods. There seems to be a continuation of the same livelihood risks in the context of land grabbing in Africa. Increasing competition among outsiders for land in all parts of Africa has already been noted. This is linked to an intensification of generalized commodity production (under neoliberal structural adjustment programmes), a generalized crisis of social reproduction and global security concerns. These reforms are changing the structure of agricultural production, land holding and natural resource use patterns, and in many instances exacerbate the conflict situation.

The four triggers for land grabbing

Unprecedented economic growth in transition countries The unprecedented economic growth in the transition countries (India, China and Brazil) has led to a rapid increase in the demand for energy (Coyle 2007). Consumers in these countries are demanding a higher standard of living and are hastening to catch up with Western welfare standards. Is this model of development sustainable, and what are its implications for the world energy stock? In addition, what does it imply for Africa, which is generally the slowest-growing continent but which is currently being heavily targeted for biofuels and food production for external interests?

The combination of higher (and more volatile) global commodity prices, the demand for biofuels, population growth and urbanization, globalization and overall economic development implies that such investments will increase in importance in the future (von Braun and Pachauri 2006; ABN 2007). In many contexts, the large-scale acquisition of land highlights renewed interest in plantation-based agriculture, which is also fuelled by scepticism regarding the effectiveness of market and trade mechanisms in guaranteeing access to basic food supplies. In addition, there is the belief that large-scale production can help modernize the agricultural sector. As Hollander (2010) observes, agrofuels are products of a globally organized system of production, exchange and consumption that provides distinct patterns and alliances within and outside spaces in intricate and complex ways. In this way, transition countries are also developing complex economic and production linkages with Africa. However, many of the deals are shrouded in secrecy, and also involve land takeover and the import of humans to Africa (as technical experts), in order to oversee production on behalf of the agro-investments and investors.

Food security Biofuel production is being introduced in situations of food uncertainty for rural and urban areas. The absolute number of undernourished Africans increased by about 20 per cent between 1992 and 2002 (FAO 2006; Kidane et al. 2006), and has further increased with the financial crisis and the increase in global food prices since 2008. Globally, more than a billion people, mostly in rural areas of the South, live in food insecure situations (IFPRI 2008). What is needed is increased food production and employment, as well as lower consumer food prices. This requires continued support for agriculture in order to improve soil fertility, water availability and crop yields. However, in Africa the agricultural systems remain rudimentary. Rukuni (2006: 2) points out that:

The circumstances of the African farmer remain perilous today. The typical farmer in Africa is a woman with a family who has one hectare or less of low fertility land with erratic rainfall and little or no irrigation. If the farmer wanted to buy fertilizer it would be more expensive than in Europe or America. Her farm faces numerous pests, crop diseases, and environmental stresses that would severely annoy a typical farmer in the United States of America (USA) or Europe. Modern equipment, backed by dynamic information technology and more resources for a European as compared to an African are the norm rather than the exception. Average crop yields in Africa are the same level as pre-industrial Europe. Even if there is increased productivity or yield improvement, farmers in Africa face dysfunctional markets, and find it difficult to compete with farmers in Europe and America.

Biofuels have been affecting the production of traditional food crops, and thus further raising world food prices. The FAO (2008: 72) argues that ‘the rapid growth in biofuel production will affect food security at the national and household levels mainly through its impact on food prices and incomes’. This affects the poor, who are mainly found in the developing nations (chapter 1). Biofuel production is also changing the traditional agricultural landscape, leading to monoculture. There is a need for concerted global action on how best to tackle the issue of biofuel production without compromising the livelihoods of rural and urban dwellers. However, so far most recommendations and guidelines are of a voluntary nature and seem to have little effect on actual practices (Chapter 1).

Small farmers are traditionally dependent on their land for their own food production (Chapter 5). One can easily picture the current situation, with poor farmers, most of whom lack access to the necessary resources (land, credit, infrastructure and inputs) and already struggle to feed themselves, being lured into engaging with biofuel crops. For a variety of reasons, most poor rural households are actually net consumers of food, rather than net producers. When the price of food rises, they become worse off because they have limited supply, given the weak competition in food retail in rural areas. At the

same time, governments have weak rural development programmes and hence cannot generate significant income on a continuous basis. The assumption is that when smallholders turn to biofuels they will be able to acquire food.

Global peak oil and alternative fuel energy sources Since the 1970s, African economies have experienced a decline in trade as their agricultural exports have become uncompetitive. Africa now faces a renewed oil crisis as global prices move upwards. Analysis of the trends on global peak oil (Chapter 3) demonstrates the fallacy of biofuel production by industrialized nations. Biofuel production can certainly contribute to damping down the rise in oil prices and can marginally improve national energy security. On the other hand, though, it is highly questionable (to say the least) whether biofuels can contribute to abating the climate crisis.

Biofuels are renewable, are clean burning and can be mixed with petrol to reduce oil dependency or used to generate electricity. Chapter 3 demonstrates that peak oil has generated a global surge in interest in alternative forms of energy, of which biofuel is central. This fuel is seen as a clean source of renewable energy that can make up for some of the declining access to fossil energy. However, the analyses and perspectives on biofuel as a provider of net energy are questioned.

Although biofuels constitute a small share of global energy consumption, a slight increase in biofuel production necessitates a significant change in land use – such as the conversion of different land uses to biofuel feedstock production. So rising food insecurity is to be anticipated, as large tracts of land are used for biofuel rather than food crops. This has a disproportionately negative impact on the rural poor (Msangi 2007; Runge and Senauer 2007; and see Chapter 1).²

Climate and environmental concerns Biofuels are being sought as an alternative source of energy, at a time when climate change issues are prominent in world politics. Yet biofuels also pose risks, particularly with respect to impending global warming. Scientific enquiry has revealed that each biofuel plant type varies considerably in terms of its energy efficiency and environmental impact. More generally, the net climate benefit outcomes of ethanol production from biofuel crops are questionable. As more forest and bush land is opened up for cultivation, a major source of carbon sink will be destroyed, and this will contribute to climate change. Forested areas of Africa are likely to be a prime area for biofuel investors, which would further deeply compromise Africa's available carbon sinks for greenhouse gases.

Climate change will bring rising temperatures worldwide and increasing desertification in many places. On balance, African agriculture is likely to suffer most from global warming, with growing numbers of people likely to be

at risk of hunger. African smallholders' finely tuned food systems are already experiencing difficulties, with the disruption of seasonal climate patterns, freak storms and increased weather variability. Simultaneously, climate change will bring irregular weather events, rising temperatures and increasing water shortages. African agricultural systems – both small- and large-scale – are very vulnerable. In welfare terms, poor rural communities are likely to suffer greatly from the negative impacts of climate change, since their lives and livelihoods depend directly upon the fragile natural resources around them (Cline 2007; Prowse and Brauholtz-Speight 2007; Giles 2007). Furthermore, the irregularity of output could also jeopardize rural non-agricultural livelihoods, given the inevitable decline in rural purchasing power that follows climatic setbacks.³

Other environmental issues that arise in connection with biofuel expansion include the risk of introducing invasive species, changing water usage patterns, potential sources of pollution from biofuel processing and the decline in local biodiversity as a result of mono-cropping. When biofuel production relies on the use of crop residues that are normally left on the ground to replenish the soil, soil fertility is adversely affected. Biofuel production may also overtax local water supplies, or be wasteful if rising fertilizer prices preclude the use of sufficient fertilizer, thus causing low yields and sub-optimal use of land otherwise available for food production.

This book promotes the issue of biopolitics, implying that biophysical resources have now become central to the global policy discourse. The 2009 Copenhagen Conference on Climate Change did indeed amplify geopolitics and the role and position of the South, as the North seemed unwilling to give up its superfluous energy needs, which were placed upfront as some sort of privilege. Africa in general finds itself 'between a rock and a hard place', because many countries lack policy mechanisms on climate change. Therefore, when the North argues for collective responsibility and discipline in the modern governance discourse (Foucault et al. 2003), it is on the basis of unequal advances in knowledge and technology. This means that the South is expected to share responsibility for problems caused by the North's higher energy consumption (Chapter 3). The North is thereby seriously undermining the path towards climate justice. The North is seen to use the morality of collective responsibility for the environment as a tacit strategy for market deregulation (Chapter 2), which in this case is coming via biofuels.

Hegemonic dissonance in governance over biofuels

For a variety of reasons, Africa has for many decades struggled to meet a wide range of basic needs, including food, income, infrastructure, technology and investment. The challenges that Africa faces take different forms for different countries and people, and there is no single answer to the myriad problems and challenges. To try to mitigate some of these challenges, African

governments usually seek to attract foreign direct investment (FDI), which is assumed to contribute to the modernization of agriculture (and certainly does so in certain contexts). However, in the current discourse, the benefits of land grabs seem to be outweighed by the damage to the livelihoods of smallholder farmers, leaving the latter worse off.

In most African countries, the regulatory and institutional frameworks for private agribusiness investments are not adapted to current trends. The role of smallholder producers in biofuel expansion has been severely neglected (Mwamila et al. 2008), because most African states have not yet established the institutional and policy mechanisms to support the biofuel expansion (Chapter 5). Yet, in Africa, ambiguous land policies and inadequate tenure rights for African smallholders exist amid the efforts by African governments to attract biofuel investments. The key issues are that there is considerable contestation over land rights, the distribution of land, and the role of foreigners in land ownership and use. In Chapter 2, Widengård argues for a broader understanding of the strategic interests of the North in Africa's land that is emerging through the biofuel expansion. Boamah also addresses this issue, in a case study of *jatropha* in Ghana (Chapter 8).

The key discourse in these two chapters is how to balance private and public interests, as well as the role of globalism or the use of 'eco-governmentality' in the governance of biofuels. There is a growing body of organizations that are resisting some of the counter-hegemonic discourse that emerges with biofuels and agro-investments. While, in some instances, African governments are not so certain about what they have been told, they have largely accepted biofuels and agro-investments based on precautionary principles. In Africa, over time, resistance to biofuels and land grabbing has been noted (e.g. chapters 6 and 7). At the local level, smallholder farmers realize that they are not part of the projects or that they are promised benefits that do not materialize. Havnevik and Haaland (Chapter 6) document the resistance that made SEKAB retreat in Tanzania. At a session of the All Party Parliamentary Group on Agriculture and Food for Development in the UK House of Commons on 27 January 2010, Robin Palmer asked Tanzanian High Commissioner Mwanaidi Sinare Maajar:

what if, at a time of great food insecurity, a foreign company working in your country exported food back home?

She replied:

we would not allow it; in fact we are in the process of drawing up a code of conduct which would prevent such a thing happening, and if any company refuses to sign it, then they won't be allowed to operate.

In the case of some countries, the domestic economic pressures would seem to imply that they have limited options to negotiate on agro-investments. The

case of Zimbabwe described by Matondi (7) clearly illustrates this trajectory. Pressures emanating from both the domestic and the global economies have created a cruel dilemma for African governments. In future, this will lead to serious questions of how to manage the political costs and pain.

This book is also framed towards understanding the global governance and techniques that are being employed to sell biofuels as a cleaner energy. This brings to the fore, in poignant ways, the North–South relationship, where inventions (machines and management systems) from the North are used by the South (for African lands and water resources), but strangely the North reaps the benefits (through export products). The diversity and complexity of land-grabbing forms and mechanisms for food and biofuels, identified in chapters 1, 4 and 8, suggest that these links are very varied. Chapter 4, on biofuels and FDI, demonstrates the construction of the relationship between the North and the South, in which the smallholders are either victims or potential beneficiaries of economic globalization. When foreign investors acquire land for biofuels, they tend to pocket most of the gains, as they repatriate foreign currency to the investing countries. The case studies in this book suggest that global governance and eco-governmentality, in particular, circumvent the notion of nation states having control over their territories and/or political agendas.

Narratives and sticking points in smallholder farming

African smallholder agriculture has experienced over 25 years of mixed fortunes: there has been underinvestment and productivity decline, but there have also been achievements in some countries (Havnevik et al. 2007). The *World Development Report* (World Bank 2007) stressed the difficulties that African farmers face in trying to compete in the global market. The scale of poverty in rural Africa remains higher than in any other region of the world, in spite of decades of programmes and strategies to address poverty, both domestic and based on external development assistance. The greatest fear related to the push towards biofuels is that smallholders in Africa, who are the core of the producers (at least 60–70 per cent of the people live and work on small family farms), would be alienated from their land. However, the enigma is that African states, which are supposed to be the protectors of the poor, could be acquiescing with foreign investors and governments in such land displacements. Promises of economic development from foreign investors and technological innovations in agriculture give some African governments grounds for optimism.

Agriculture in Europe and Asia is synonymous with technology and infrastructure, and many African countries would also like to see this. However, at this stage in Africa's development, technological advances in countries with a poor skills base and low literacy levels are likely to lead to the majority of the African rural poor ending up as spectators, watching the export of agricultural

production from their own countries. The failure of the Green Revolution in Africa in the 1970s provides examples of the fallacy of the biofuel and land-grabbing agenda. Smallholders are at the tail end of production, and rarely have any power to influence the control and management of world consumer markets, where the energy prices are decided. Would it then be morally right to make African biomass crop-production enclaves to meet the affluence needs of the North?

Africa, however, badly needs to raise food production, create employment and reduce consumer prices (while low in absolute terms, food prices are often high relative to income). This requires continued investment in, and support for, agriculture. Low soil fertility and lack of water are the most fundamental biophysical constraints to raising agricultural productivity. The smallholder farmers in Africa face numerous other challenges, such as inadequate land and financial resources. Governments, on the other hand, have struggled to prioritize agriculture, even though it provides the greatest scope for an escape from poverty. Recent agreements to allocate at least 10 per cent of African national budgets to agriculture have not generally been implemented, in spite of numerous conferences.⁴ The prospects for increasing resources to African smallholder agriculture are slim, given that this sector remains on the margins of the state and markets. Yet smallholder agriculture, led mostly by women, does provide the bulk of the food needs in African families. In many countries, smallholder farms are further characterized by a low level of technological innovation, and by poor market orientation and infrastructure. How, then, can smallholders faced with these challenges produce biofuels?

African farming has developed along two different trajectories: smallholders (who use mainly rain-fed cultivation, adapted to the local natural resource bases) and large-scale mono-cropping in capitalized plantation farming (Djurfeldt et al. 2005; Gibbon and Ponte 2005). Previous research has argued that small family farms are often more efficient than large-scale agriculture (Berry and Cline 1979; Binswanger and McIntire 1987; Bruce and Migot-Adholla 1994; Djurfeldt et al. 2005). However, the current trend, not least in biofuel production, is for the promotion of large-scale units. Large-scale monoculture farms are the most blatant manifestations of these deals where machines displace the poor and the powerless. Anuradha Mittal (2010) argues the case strongly: 'We have an agricultural system, which is upside down and backwards, which has replaced diversity with monocultures and self sufficiency with increased dependency on markets.' Arguments in support of large-scale agriculture in Africa are once more gaining currency (Collier 2008). Africa is most likely to witness a gradual shift in land use from the cultivation of crops for biofuels. The change in land use on a larger scale will happen at different levels and gradually, through the conversion from one crop to another, and from pastoral land to cropland.