



The Food Regime in the Land Grab: Articulating 'Global Ecology' and Political Economy

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Abstract

This paper situates the land grab in the conjunctural crisis of capitalist ecology, expressed in climate, energy and food crises, which in turn transform the food/fuel regime. This crisis serves a double purpose: of justifying investment in land offshore to offset shortages in the name of food and (alternative) energy security on the one hand, and on the other, to facilitate a new wave of investment in agriculture as a solution to the profitability crisis of capital in an era of financialization. In addition, this new enclosure is an expression of transition in the food regime, as its geopolitical form and productive content re-centers on Southern land and the emerging bioeconomic imperative. The paper explores this transition, and whether and to what extent 'agriculture' itself is the answer to the current accumulation crisis, noting that capital's profitability depends on subsidies from home and host governments, and infrastructural support of land grabbing by development agencies. Related to this is the discursive framework spun around investment in farm, forest and common land, and what it might tell us about the refashioning of necessity and possibility in the neoliberal development project of embedding states, and the development establishment, in the imperatives of accumulation and dispossession.

Introduction

In situating the land grab, I want to underline that land grabbing is nothing new, and yet the recent 'land rush' has its own distinctive features. One might say that land grabbing under colonialism was tragedy, this time repeating as farce. The kernel of truth here is that land grabbing today continues the aggression of colonialism, but this time with a desperation born of crisis, both present and future. Less than a decade ago, the international peasant coalition, *Vía Campesina* claimed that agribusiness power no longer resided in control over land, rather in the relations that surround agricultural production – those that 'control loans, materials supply, the dissemination of new technologies, such as transgenic products, on the one hand, and those that control national and international product warehousing systems, transportation, distribution and retail sales to the consumer, on the other hand, have real power' (2004, 5). In the meantime, the triple crisis (financial, energy and food) has altered the landscape, so to

speak, such that with the prospect of rising energy and food prices, land is back on the investment agenda, but this time as a speculative venture and hedge against food and fuel supply shortfalls.

To address the realignment of interest in land (and water) this paper examines the land grab through the lens of 'global ecology' and political economy. Wolfgang Sachs (1993, 20) defined *global ecology* as the 'rational planning of the planet for Northern security,' following the Earth Summit in 1992, where Southern forests, for example, were to be managed as carbon sinks and for biodiversity preservation – bioregions of intrinsic (ecological) value to a Northern-led accumulation drive. Sachs noted that 'Far from "protecting the earth", environmental diplomacy which works within a developmentalist frame cannot but concentrate its efforts on rationing what is left of nature' (1993, 13). At the same time, by classifying the atmosphere and biodiversity as a 'global commons,' the Bank's Global Environmental Facility 'was able to override the local claims of those who rely on local commons and effectively assert that everyone has a right of access to them, that local people have no more claim to them than a corporation based on the other side of the globe' (Hildyard 1993, 34). The terms of reference of the contemporary 'land rush' are similar, namely, that global food security and ecological security (via 'green' biofuels) depend on 'global' access to land for offshore food, fuels and general biomass production. 'Northern security' has taken on a different meaning, associated with the crisis of neoliberal capitalism, as peak oil, peak soil and food riots stalk the landscape and green solutions are expected. And so the World Bank argues:

...although deforestation associated with the expansion of the agricultural frontier has been a serious problem (and one of the world's largest contributors to greenhouse gas emissions), our analysis shows that the projected increase in the demand for agricultural commodities over the next decade could be met, *without cutting down forests, by increasing productivity and farmland expansion in non-forested areas* (2010, vii, emphasis added).

From the *political economy* angle, this crisis of neoliberal capitalism expresses itself in 'rationing what is left of nature' through historically specific mechanisms. Arguably the food regime itself is in transition, with the prospect of a large-scale relocation of capitalist agricultures to the global South overdetermined by world-market 'override' (export bans, offshore investment) following the 2007-08 'food crisis.' This migration of agricultural production has several drivers, including soil depletion in the 'breadbasket' regions and rising costs of compensatory inputs, cheap land in the South increasingly accessible through new forms of 'environmental diplomacy' (offset protocols/Clean Development Mechanism, World Bank governance interventions), climate and food crises spurring biofuel and 'agriculture for development' solutions implicating Southern land, and financialization. Facilitating this transition are accommodating policies of host governments, public-private biofuel complexes, and public authority governance mandates regarding land titling -- legitimating new initiatives for the development industry (cf Da Costa and McMichael 2005).

In sum, the crisis of neoliberalism is deeply rooted in the conjunctural crisis of capitalist ecology, expressed in climate, energy and food crises. Not only does this crisis propel and justify investment in land offshore in the name of addressing food shortages and alternative energy, but also investment in agriculture presents a solution to the profitability crisis of capital in an era of financialization. To the extent that agriculture and its products are absorbed into financial chains, the mix of physical crops becomes increasingly irrelevant to the financial profit calculus. Here, production decisions are driven by a boardroom financial calculus, often with little concern for allocations between crops for food or fuels, and/or environmental integrity.¹ In this sense, the so-called rational planning of planetary resources such as land (and water)² is driven as much by financial goals as by material considerations.

¹ As Merian Research (2010: 7) reports, greenwashing claims by investors of associations with environmental NGOs are often bogus. For this reason, and reasons of legitimacy under pressure from civil society, the development agencies are engaged in formulating (voluntary) codes of conduct regarding land acquisition and use.

² 'The obvious motives for the deals are the spike in food prices and the subsequent decision of governments in several key producer countries to restrict their exports, threatening the food security of food importing countries such as the Gulf states, China and South Korea (the main participants in the deals). However, water shortages are another, hidden driver. Peter Brabeck-Letmathe, the chairman of

This paper examines the land grab through this prism. There is an apparent Jekyll and Hyde operation, ultimately substitutable, between food and fuel claims. Land grabbing for food justified by the world food crisis is undertaken by combinations of development agencies (WB, FAO), investment banks (Goldman Sachs), funds (Carlyle Group) and philanthropists (Soros, Gates Foundation), and was sanctioned by the World Food Summit of 2008. Land grabbing for biofuels and/or biomass, on the other hand, is undertaken largely by private investors and sometimes by governments through State Firms and Sovereign Wealth Funds (McMichael 2009, ETC 2010). The controversy over biofuel claims (emissions reduction?) and impact (land clearance, displacement) has stigmatized biofuels, represented by UN Human Rights *Rapporteur* Jean Ziegler's 2007 charge that they are a 'crime against humanity.' Subsequent attempts by the World Bank (and IFPRI) to elaborate 'Principles for Responsible Agricultural Investment' (RAI) were met with current UN HR *Rapporteur* Olivier de Schutter's charge of 'Responsibly destroying the world's peasantry' (2010), and an attempt to construct more democratic Voluntary Guidelines through the FAO and its Committee on Food Security.

Biofuels anticipate the 'new bioeconomy,' marking 'just the beginning of converting the liquid fuel market to biomass' (ETC 2010, 3). As ETC (2010, 6) notes:

The new bioeconomy as currently envisioned by foresters, agribusiness, biotech, energy and chemical firms furthers the ongoing enclosure and degradation of the natural world by appropriating plant matter for transformation into industrial commodities, engineering cells so they perform as industrial factories, and redefining and refitting ecosystems to provide industrial support 'services.'

And the new bioeconomy targets the global South, as Stephen Chu, US Secretary of

Nestlé, claims: "The purchases weren't about land, but water. For with the land comes the right to withdraw the water linked to it, in most countries essentially a freebie that increasingly could be the most valuable part of the deal." He calls it "the great water grab".' Duncan Green, <http://www.oxfamblogs.org/fp2p/?cat=42>

Energy, observed in 2006: 'Land best suited for biomass generation (Latin America, Sub-Saharan Africa) is the least utilized' (quoted in ETC 2010, 15). As a European report claimed in 2004: 'A prerequisite for the bioenergy potential in all regions is ...that the present inefficient and low-intensive agricultural management systems are replaced in 2050 by the best practice agricultural management systems and technologies.'³ This observation echoes World Bank rhetoric about 'yield gaps' as justification for the introduction of value-chain agriculture. Whether the commons or peasant farms, land and its living carbon bounty is the new target for the biomasters, as the limits of dead carbon (fossil fuel) become apparent. Rachel Smolker notes that, beyond biofuels:

Biomass is also increasingly in demand for heat and electricity production, chemicals, manufacturing and industrial processing, as well as an ever-expanding range of materials and products. *Agriculture is thus poised uniquely at both 'ends' of the debates on food and energy policies, as both a source of, and a solution to, the problems at hand* (2008, 519, emphasis added).

The land grab, then, anticipates the rising value of living biomass as the source of inputs into the new bioeconomy, where 'innovation in synthetic biology is allowing companies to retrofit the hydrocarbon economy to accommodate carbohydrate feedstocks' (ETC 2010, 11). The US Department of Energy claims: 'there are very few products that are made today from a petroleum base, including paints, inks, adhesives, plastics and other value-added products, that cannot be produced from biomass' (quoted in Smolker 2008, 520).

On the face of it, this development suggests that the land grab is a vehicle of transition, whereby the (profitability) projections and technologies of the new bioeconomy depend on increasing access to offshore production of biomass to power affluent economies. At the same time, previous geopolitical relations of the corporate food regime, anchored in the EU/US agro-exporting of bulk commodities, are shifting as Northern farm sectors

³ Edward Smeets, et. al., "A quickscan of global bio-energy potentials to 2050," *Bio-EnergyTrade*, March 2004. Available online at: www.bioenergytrade.org/downloads/smeetsglobalquickscan2050.pdf

lose their competitive advantage in a world market governed by new forms of neo-mercantilism, with subsidies favoring offshore agriculture where land, water and labor are substantially cheaper. Departing from, or complementing, previous patterns of investment in high-value export crops, the new investment patterns in the global South favor bulk commodities – thus, for Southeast Asia, ‘83% of the farmland being acquired or leased on a long-term basis is dedicated to the production of major row crops (soft oilseeds, corn, wheat and feed grains)’ (Borras and Franco, 2010, 31).⁴ The European food sovereignty movement has warned: if ‘Europeans want to maintain an agricultural production in Europe, they need a European agricultural policy. Otherwise Brazil or other countries will produce the base of our food’ (CPE, 2006).

In short, the land grab expresses the crisis and transformation of industrial agriculture and its postwar political coordinates, nevertheless framed in an arrogant security language of feeding the world and saving the planet.⁵ The emerging bioenergy economy, fusing global ecology and political economy, depends on the enabling role of financialization in managing a transition in capital accumulation and its foundations towards a new extractive food/fuel regime enclosing the world’s remaining land and water.

Financialization and the land grab

The land grab coincides with the era of financialization,⁶ characterized as a conjuncture in which investors prefer to hold capital in liquid (rather than illiquid/asset) forms. Arrighi

⁴ Cotula notes that some contracts (Sudan, Mali) ‘appear to create no safeguards to ensure that local food security needs are met’ – at odds with claims by host governments to improve domestic food security (2011, 37).

⁵ Thus, ‘The spectre of a hungry world is being used to push the agenda for industrial agriculture, but in reality, the majority of the land is used for producing animal feed and agrofuels, as well as land speculation, rather than food crops. A World Bank report on land acquisitions shows that only 37% of this land is used to grow food’ (Henriques 2011).

⁶ In explaining financialization as a conjunctural phenomenon, Arrighi argues the recent neoliberalization of political economy is not simply a pendulum swing away from Keynesianism, but a consequence of last-ditch efforts by the US government during the 1980s to attract capital flows to the US with rising interest rates, in order to overcome the relative decline in its industrial productive capacity (Arrighi 2007, 145). Such conditions encouraged preference for holding capital in liquid form and was accomplished by instituting rules promoting liberal capital markets and deregulating banking.

(1994) has argued that 'financialization' signals declining hegemony, as a lead state's productive capacity loses its competitive edge in international political-economy, and its industrial capitalists switch investment from fixed capital into financial channels. This liquidity preference, intensified institutionally by neoliberal-led financial deregulation, has encouraged securitization (consolidating and selling debt), mergers (including firm acquisition by private equity companies that unbundle unprofitable units for financial gain) and general financial speculation.⁷

Financialization is associated with a global decline in productivity outside of the information and communications technology sectors. Over the past decades, manufacturing has steadily relocated to Southern regions of cheap labor (and land) through export processing, assembly and subcontracting systems. Meanwhile, Northern consumption of such offshore products was sustained for a while by the banking revolution, involving profligate mortgage lending and rising consumer debt. By the twenty-first century declining industrial productivity combined with a collapse of the financial derivatives market, expressed in an accumulation crisis. A notable consequence has been the decisive shift of investment capital into speculative ventures in land, food and biofuels. For example, between 2004-07, venture capital investment in biofuels increased by 800 percent (Holt-Giménez 2007,10). Meanwhile, trade in agricultural futures and other derivatives increased in 2007 by 32 percent, and 'the value of commodities derivatives that are traded *over the Counter*, i.e. off-market, rose by nearly 160% between June 2005 and June 2007. The number of futures between October 2007 and the end of March 2008 increased by 65% on the Chicago Mercantile Exchange, without a corresponding increase in real production' (Bank for International Settlements, cited in Ernst & Wahl 2010, 13).⁸ The resulting food price inflation, generating the 'food crisis' of 2007-08, shifted investor attention to offshore crop-land.

⁷ Parallel deregulation in the financial services industry thus enabled cross-over investments by banks, in addition to a process of concentration and centralization, such that between 1980 and 1998 some 8,000 bank mergers occurred, accounting for assets of over \$2.4 trillion (Shattuck 2008).

⁸ Thus, 'the excessive speculation in the financial commodity markets has seen a parallel increase in food prices. The increase between March 2003 and March 2008 of the agricultural commodities futures has been in parallel with the price increases during the same period for coffee with 167%, for soybean oil with 199% and for wheat with 314%' (Kerckhoffs, van Os, and Vander Stichele, 2010, 7).

Food itself became a speculative investment through the device of commodity index funds, whereby investors target ‘agrofutures’ (alongside energy and industrial metals)⁹ as agricultural contracts were converted into derivatives, under pressure by financiers on legislators to deregulate the commodity contract business in the 1990s. Henceforth handlers of agricultural products were joined by speculators in an agrofutures market. Thus what was once a market in food converted to a self-driven market in food contracts, counting on rising derivative prices, as futures traded multiple times. Formerly a mechanism of hedging risks on food prices for producers and consumers, reducing volatility, agrofutures went virtual, as financiers constructed commodity index funds allowing no-risk profit from price volatility – by shifting most clients’ index fund investments to safer ventures and then profiting from rising, or declining, food prices (Kaufman 2010, 30-31). Buying and selling food futures, then, developed into a derivative market, which in turn inflated food prices. Speculation, enabled by computer automation, intensified in the mid-2000s as the real estate market crisis unfolded. At that point, investors shifted funds into commodity futures: between 2003 and 2008 commodity index holdings increased from \$13billion to \$317billion (Kaufman 2010, 32). This speculative spike resulted from the process whereby ‘the mechanism created to stabilize grain prices had been reassembled into a mechanism to inflate grain prices’ (Kaufman 2010, 34).¹⁰

The general accumulation crisis, expressed through the conjunction of food, energy and financial crises, has resulted in international capital markets gravitating towards agriculture as a relatively safe investment haven for the relatively long-term. Most

⁹ As of July 2008, the Standard & Poor’s-Goldman Sachs Commodity Index accounted for about 63% of the index fund market share, and 32% share was held by the Dow Jones-AIG index – with agricultural commodities accounting for about 30% of these indices, with the rest in energy, base metals and precious metals (IATP 2008).

¹⁰ Financial speculation compounded food price inflation which spiked in 2008: rice prices surging by 31% on March 27, 2008, and wheat prices by 29% on February 25, 2008. *The New York Times* (April 22, 2008) wrote: ‘This price boom has attracted a torrent of new investment from Wall Street, estimated to be as much as \$130 billion;’ with the Commodity Futures Trading Commission noting that ‘Wall Street funds control a fifth to a half of the futures contracts for commodities like corn, wheat and live cattle on Chicago, Kansas City and New York exchanges. On the Chicago exchanges... the funds make up 47 percent of long-term contracts for live hog futures, 40 percent in wheat, 36 percent in live cattle and 21 percent in corn’ (quoted in Berthelot 2008).

notably, in 2007, “soft” commodities (renewable crops) overtook “hard” commodities (non-renewables, such as oil and metals) as ‘prime performers in the commodities investment market. Researchers have cited new demands from bioenergy and other “bioproducts” from agricultural crops among the causes of this bull-run on soft commodities’ (Daniel 2009, 5). In addition to food futures and crops, land and agriculture have constituted a new investment frontier in recent years:

Financial investors have unleashed a wave of funds in the past three years, raising capital to invest across the entire agricultural value chain, from greenfield land sites to farmland to agribusiness and agro-processing all over Africa. This has taken the investment thesis way beyond portfolio investment in listed debt and equity markets, and from primary capital markets issuance. Making money from land and agricultural production demands a longer-dated approach - - all of the new land funds have lock-ups, in some cases out to 10 years -- but the returns to be had are potentially mouth-watering, from the mid-teens to upwards of 25 percent per annum.

As well as financial investors aggressively focused on generating outsize returns, inflows into African land have attracted a significant volume of funds from a large number of multilateral development organisations such as the International Finance Corp (IFC), African Development Bank (AfDB), and OPEC Fund for International Development (OFID); single-country (bilateral) development finance agencies; food multinationals; foundations from around the world, as well as SRI funds (Mullin 2011).

Some examples of this trend in agricultural financialization are as follows: On June 5, 2008, *The New York Times* published a lead article, ‘Food is Gold, So Billions Invested in Farming,’ with some key statements, as follows:

- ‘It’s going on big time. There is considerable interest in what we call ‘owning structure’ – like United States farmland, Argentine farmland, English farmland – wherever the profit picture is improving’ (Brad Cole, president of

Cole Partners Asset Management, Chicago – hedge fund for natural resources).

- ‘The world is asking for more food, more energy. You see a huge demand.... What this new investment will buy is new technology. We will be helping to accelerate the development of infrastructure, and the consumer will benefit because there will be more supply’ (Axel Hinsch, CEO of Calyx Agro, a division of Louis Dreyfus Commodities, owning tens of thousands of acres of cropland in Brazil, backed by large institutional investors, like AIG).
- Susan Payne, founder and CEO of Emergent Asset Management (UK), which is raising \$450-750 million for investment to consolidate and industrialise farmland in Sub-Saharan Africa, for food and biofuels (jatropha): ‘We are getting strong response from institutional investors – pensions, insurance companies, endowments, some sovereign wealth funds.’ The fund selected Africa because ‘land values are very, very inexpensive, compared to other agriculture-based economies. Its microclimates are enticing, allowing a range of different crops. There’s accessible labor. And there’s good logistics – wide open roads, good truck transport, sea transport.’

In June, 2009, the Executive Director of JP Morgan, stated: ‘Physical agriculture’s assets are the new focus in longer term investments as institutional investors explore opportunities in everything from raw land to grain elevators to food processing plant’ (quoted in Gillam 2009). In Southeast Asia: PT Daewoo Logistics Indonesia, a subsidiary of South Korea’s Daewoo Logistics Corporation, and Cheil Jedang Samsung recently announced ‘a partnership to invest \$50 million to grow and process energy crops on the Indonesian islands of Buru and Samba... [for export] back to South Korea. In early 2008, Sinopec and the Chinese National Overseas Oil Corporation, two state-owned oil giants, made investments of \$5 billion and \$5.5 billion, respectively, in Indonesia to grow and process corn into biofuel to be exported to China’ (Daniel 2009, 4). The point about financialization is that it is not simply wealthy investors like Bill Gates, James Wolfensohn, and George Soros and other financial interests (eg, Louis Dreyfus, Merrill Lynch, and sovereign and pension funds) investing in agrofuels, but

conglomerates in traditional sectors like oil, auto, chemicals and agribusiness¹¹ that deploy their financial resources to capitalize on the new fuel frontier.

These reports suggest a significant deepening of agro-industrialization in a crisis conjuncture.¹² While agro-industrialization has concentrated in the global North, powering a cheap food regime, its profitability is now in decline, propelling a movement offshore to exploit cheap inputs. The crisis for industrial agriculture is double-edged. Where industrial agriculture experiences a declining biophysical productivity, such as the drop in efficiency of nitrogen use from 60 to 20 percent from the 1950s to the 1990s (van der Ploeg 2010, 100) and loss of biodiversity and crucial 'ecosystem services' such as pollination and soil formation (Weis 2010, 316), the cost of 'biophysical override' (commodity inputs) escalates (Weis 2007). Both trends drive agro-capital offshore to appropriate Southern lands. And this relocation of investment is compounded by anticipation of risk evident in climate change.¹³

Despite (and because of) productivity gains, the green revolution has evidently run its course as its 'external' costs rise, notably pest resistance, soil erosion, water table depletion and farmer debt (Sharma 2004, Zwerdling 2009). This has been compounded by rising requirements of energy and irrigation water with declining efficiency of use (van der Ploeg 2010, 100). The green revolution was initially profitable for upstream supply firms (seeds, machinery, agro-chemicals). However, the upstream and downstream companies servicing the grain corporations, accounting for 20 percent of food expenditures, have experienced a profit squeeze as rising investments (chemical inputs, genetic engineering and mechanization) have not resulted in rising rates of productivity (Holt-Giménez 2007b, 10). Agro-industry has restructured in response: (1)

¹¹ Eg, Total, Shell, BP, Exxon-Mobil, Petrobras, ADM, Cargill, Bunge, Monsanto, Syngenta, Dow Chemicals, Bayer, DuPont, BASF, etc. (Houtart 2010, 131-2).

¹² Weis notes: 'Just under half of the world's total grain production (48 percent) is directly consumed by humans, while 35 percent is fed to livestock and 17 percent to biofuel production. The surge in the latter two comes at a time when the yield gains associated with the Green Revolution have effectively maxed out, and the volume of per capita grain production on a global scale has been level since peaking in 1986' (2010, 327).

¹³ Thus a GRAIN researcher notes: 'Rich countries are eyeing Africa not just for a healthy return on capital, but also as an insurance policy. Food shortages and riots in 28 countries, declining water supplies, climate change and huge population growth have together made land attractive' (Vidal 2010).

compositionally, by centralizing capital into 'financialized' food conglomerates (Rama 2005, Burch and Lawrence 2009) to manage the profit crunch; and (2) contextually, with rising offshore investment in cheap land, water and labor in the global South.

The consolidation of 'world agriculture' (McMichael 2005) or the 'interchangeability of large agricultural systems' (van der Ploeg 2010, 101) based on industrial crops, or high-input contract farming is the result. The familiar contours of the food regime, anchored as it has been in subsidized Northern agro-industry, at the expense of Southern farming, are undergoing erasure as global agro-industrial restructuring spawns an emergent regime of offshore food/fuel supply zones.

Agriculture as capital's new frontier?

Rising food prices, peaking oil, emission mandates, and stalled investment funds find material resolution in the land grab, accompanied by an ideology of enclosure in the name of humanity (food) and the environment (green fuel). Whether agricultural investments can resolve the profitability crisis of capital in general is in question, but the short answer may be that the logic of financialization is to privilege futures over productivity gains. Certainly there is development agency rhetoric regarding the 'yield gap' between attainable and potential yields in agriculture on Southern lands. For example, the World Bank claims 'none of the African countries of most interest to investors is now achieving more than 30% of the potential yield on currently cultivated areas' (2010, vii). And the European Commission advocates land reforms to address this gap:

Secure access to land and secure land tenure and use rights are prerequisites for higher productivity of small holder farmers. Effective national land policies and laws are essential, requiring governments to take priority action on land. Where countries develop policies on agriculture, land, and biofuels, the EU and its Member States should advocate that these policies address concerns over availability and access to food and stimulate the integration of smallholder farmers in production chains (quoted in Borras and Franco 2011, 40).

The question of a 'yield gap' is a euphemism for an extractive form of agriculture, where 'biomass' is produced as a world/corporate product, not for local or domestic food/fuel sovereignty. Whether this results in a significant yield increase (biotechnology or not), because it is an outsourcing operation to transfer food surpluses to consumers elsewhere this is only 'development' for investors, not producing regions. And the assumption that value-chain agriculture will resolve the 'yield gap' is misleading in two senses: first, that small-scale farming is not necessarily less productive than industrial agriculture (cf Pretty, et al 2006, Hamer and Anslow 2010); and second, that it is sustainable, compared with peasant farming along agro-ecological lines (Altieri 2010). Nevertheless, land and agriculture appears to be an immediate answer to the accumulation crisis, but tellingly it depends fundamentally on Northern subsidies to agribusiness, energy and transport companies, and Southern concessions to investors.

Noting that agriculture is generally considered an inferior source of added value, François Houtart asks: 'How, therefore, can agriculture become a new frontier for the accumulation of capital?' (2010,127). Because of profitability limits given by food demand inelasticity, compounded by the active marginalization of the majority of humanity (as consumers), the only feasible answer is agrofuels, 'which have come just in time to revive the prices of agricultural products and their role as a financial refuge in times of crisis' (Ibid, 128).¹⁴ Affirming this view, the UN reported in 2007 that biofuels were the fastest growing segment of the world agricultural market (ETC 2007, 2), fueled by cross-sectoral (and infrastructural) alliances between energy, agribusiness, trading companies, hedge funds, sovereign funds, states, UN agencies and universities.¹⁵ The expansion of an agrofuels frontier in the global South appropriates cheap or free land and low-cost labor on industrial plantations of sugar cane, soya, eucalyptus, oil palm, maize, wheat and jatropha. And it will only intensify as the 'new bio-economy' expands.

¹⁴ For producers and traders 'the surging demand for fuel and feed is a strong counter-force to rising production costs, and both pressures point towards higher prices for basic foods' (Weis 2010, 328).

¹⁵ For details see ETC (2007), GRAIN (2007), and McMichael (2009).

The cost of land may be low for investors, but not to the locals.¹⁶ For example, in Ethiopia, one attractive investment site for agrofuels, an agriculture ministry official identified over seven million acres of ‘virgin land,’ to be leased at an annual rate of about 50 cents per acre (Rice 2009). And the minimum wage in Ethiopia is about 8 birr (39p) a day (Rice 2010). Ethiopia’s ‘land lease project,’ intended to develop large-scale commercial farming (mainly for export of food and fuel), will involve allocation of three million hectares of ‘idle land’ by 2013 (about 20 percent of currently cultivated land). However, an indigenous Anuak from the fertile Gambella region of Ethiopia observed: ‘All the land round my family village of Illia has been taken over and is being cleared. People now have to work for an Indian company. Their land has been compulsorily taken and they have been given no compensation...’ (quoted in Daniel 2010, 28). International Land Coalition policy specialist, Michael Taylor, has noted: ‘If land in Africa hasn’t been planted, it’s probably for a reason. Maybe it’s used to graze livestock or deliberately left fallow to prevent nutrient depletion and erosion. Anybody who has seen these areas identified as unused understands that there is no land in Ethiopia that has no owners and users’ (quoted Ibid, 20).

In short, cheap land is available as a subsidy to investors by governments trading away social reproduction rights of smallholders, and transforming them into a labor force. Capital’s profitability here is guaranteed by *publicly-managed enclosure*. Agrofuels may be a new frontier of capital accumulation, but they depend on subsidies from home and host governments.¹⁷ Public subsidies underpin the ‘agrofuels project,’ based as it is on the ‘externalization’ of a number of ‘costs.’ These costs include the rights of small farmers to ancestral lands, food insecurity arising from the conversion of food-producing

¹⁶ For example, in Colombia between 2001-2005, 263,000 peasant families were expropriated from 2.6 million hectares by agrobusiness and/or paramilitaries interested primarily in oil palm development (Houtart 2010, 107). Houtart claims that 60 million people risk expulsion by biofuels (Ibid, 119).

¹⁷ According to Friends of the Earth and EarthTrack, the combination of the Renewable Fuels Standard Mandate (which provides a market for biofuels) with tax credits would subsidize the US biofuels industry to the tune of \$400 billion through 2022 (www.foe.org/biofuelsubsidies). Analyst Bloomberg New Energy Finance reported that ‘in 2009 governments provided subsidies worth between \$43bn (£27bn) and \$46bn to renewable energy and biofuel industries, including support provided through feed-in tariffs, renewable energy credits, tax credits, cash grants and other direct subsidies’ (Business Green 2010).

land to food- or fuel-crop export agriculture, environmental deterioration resulting from industrial agriculture, and increased greenhouse gas emissions. Each of these issues eventually become monetary (and opportunity) costs, associated with human displacement, food shortages, and ecological disruptions.

Importantly, the land grab is not merely an immediate solution to an accumulation crisis via investment fund management within a subsidy regime. It represents an agro-imperial development trajectory premised on sacrifice: of land and its inhabitants to a financial calculus represented as a necessary global good (food yields, green fuels). As expressed in innumerable reports in the media, journals, and NGO outlets, the land grab effectively authorizes large-scale removal of peasant populations from ancestral lands to install 'agriculture without farmers' -- as the international peasant coalition, *La Via Campesina*, calls agro-industrialization. In this process, biomass-driven land grabbing follows a diabolical logic: arresting a crisis of profitability for capital at the expense of human and natural ecology. At the same time, it foreshadows a 'biomass regime' in the making, based in a second offshoring of agriculture (replicating the effects of Corn Laws abolition in 1847), and the emergence of new South-North and South-South agricultural trade relations.

The land grab complex

Africa is the target of half the land grab projects, followed by Asia, Latin America and Eastern Europe'. According to GRAIN (2010), source of the World Bank report on large-scale land acquisitions, by the end of the first decade of the new century, there were 389 land deals in 80 countries, where the 'bulk (37%) of the so-called investment projects are meant to produce food (crops and livestock), while biofuels come in second place (35%).' The 'global land grab' combines the domestic construction of land rents with *new* mercantilist food security practices, as foreign governments sponsor offshore agriculture in the interests of national food and energy security. Assisted by World Bank policy, the land grab is represented as a form of development, insofar as land 'development' is associated with productivity gains and employment, and indebted governments in the global South stand to receive foreign investment and hard currency

from conversion of their land and forests into agro-export platforms. Lorenzo Cotula's research suggests that host states expect investment in infrastructure to develop landed property – though he notes that leasing land for free or at less than market rents encourages speculative investment given the long contracts and lease transferability (2011, 22-24).

The NGO sector follows a similar logic, claiming biofuels generate employment through rural diversification. While Oxfam states in its 'Bio-fuelling Poverty' report: 'Biofuels need not spell disaster for poor people in the South – they should instead offer new market and livelihood opportunities. But the agro-industrial model that is emerging to supply the EU target poses little in the way of opportunities and much in the way of threats' (2007, 5), its solution is to propose a set of social principles governing the development of a biofuels industry. Complementing Oxfam's social vision is the UK Gallagher Report (2008), which cautions against displacing food crops, but suggesting alternative energy crops can simultaneously provide new employment and local development opportunities to rural communities. By contrast, estimates are that in tropical regions: '100 hectares dedicated to family farming generates 35 jobs. Oil-palm and sugarcane provide 10 jobs, eucalyptus two, and soybeans a scant half-job per 100 hectares, all poorly paid... Hundreds of thousands [of smallholders] have already been displaced by the soybean plantations in the "Republic of Soy", a 50m hectare area in southern Brazil, northern Argentina, Paraguay, and eastern Bolivia' (Holt-Giménez 2007, 10). And Cotula's research documents the vagueness about local employment contracts (2011, 25-26).

The enclosure of land in the global South revitalizes a long-standing (but institutionally dormant) modernization trope, namely that modernization of agriculture is necessary to development. The bias towards industrialization was in part shaped by the intervening food regimes, which subsidized Third World manufacturing with cheap food imports from the US and European 'breadbaskets,' undermining peasant agriculture in general, alongside targeting strategic states (eg, India, Pakistan, the Philippines, Indonesia, Vietnam, Turkey, Brazil, Mexico, Argentina) with a green revolution that selected for farmers with the resources to adopt the technological package. Elsewhere (particularly

Africa), food dependence expanded as food corporations obtained privileged access to domestic markets via WTO rules (McMichael 2005). Provisioning through the global market, in a neoliberal form of 'food security,' is now in question, given the protectionism arising from the 2007-08 food crisis. This interruption, along with the shift in financial investment from manufacturing into agro-food futures and land and agriculture, not only provides the development industry with a new crusade, but also portends a reconfiguration of the familiar patterns of the so-called 'cheap food regime.'

The recent World Bank *World Development Report (2008)*,¹⁸ centering on 'agriculture for development,' was the first time in a quarter of a century that this key development institution paid attention to agriculture. It appears that the urgency of the food and energy crises has refocused the attention of the global political-economic elite on mobilising agricultural resources to offset food, water and fuel shortages. Agricultural land in the global South, in particular, is targeted for 'productivity increase' via technification. For example, Susan Payne, CEO of Emergent Asset Management (a UK investment fund planning to spend \$50m on African land) declared: 'Farmland in sub-Saharan Africa is giving 25% returns a year and new technology can treble crop yields in short time frames... Agricultural development is not only sustainable, it is our future. If we do not pay great care and attention now to increase food production by over 50% before 2050, we will face serious food shortages globally' (quoted in Vidal 2010).

In Africa, much of the land is state land but communally held, and as such is subject to government designation as 'idle' land,¹⁹ given potential rewards of commercialization. Unsurprisingly, international development and financial institutions are working behind the scenes on privatizing land relations to enable and attract foreign investment in African land. US investment, for example, is encouraged by the US government's Millennium Challenge Corporation (MCC), which disburses money in the form of grants to particular countries on condition that they meet certain neo-liberal economic criteria. Most MCC Compacts signed with African countries focus on agriculture, with a central

¹⁸ For critical reviews, see the *Journal of Agrarian Change*, 39, 6 (2008).

¹⁹ This is also the case elsewhere, such as in Southeast Asia – see, eg, Cotula et al (2008).

land privatization component, supporting 'market-based solutions to food security'. Such provisions include certifying outgrowers for food exports, constructing infrastructure to gain access to world markets, and partnering with The Alliance for a Green Revolution in Africa (AGRA) to provide inputs to farmers in their first year (GRAIN 2010). The Gates Foundation (financing AGRA) suggests that enabling the commercial development of African agriculture 'will require some degree of *land mobility* and a lower percentage of total employment involved in direct agricultural production' – suggesting an eviction trajectory (Xcroc 2009).

IFC Performance Standards on Social and Environmental Sustainability are quite explicit concerning displacement of rural peoples, for example, Performance Standard #5: Land Acquisition and Involuntary Resettlement refers 'both to physical displacement (relocation or loss of shelter) and to economic displacement (loss of assets or access to assets that leads to loss of income sources or means of livelihood) as a result of project-related land acquisition' (quoted in Daniel 2010, 49). The text continues:

Unless properly managed, involuntary resettlement may result in long-term hardship and impoverishment for affected persons and communities, as well as environmental damage and social stress in areas to which they have been displaced. For these reasons, involuntary resettlement should be avoided or at least minimized. However, where it is unavoidable, appropriate measures to mitigate adverse impacts on displaced persons and host communities should be carefully planned and implemented. Experience demonstrates that the direct involvement of the client in resettlement activities can result in cost-effective, efficient, and timely implementation of those activities...

Beyond the assumption that some, eventually more, communities will be displaced into resettlement areas 'with appropriate disclosure of information, consultation, and the informed participation of those affected,' there is the additional assumption, spelt out in Performance Standard 7, that 'Private sector projects may create opportunities for Indigenous Peoples to participate in, and benefit from, project-related activities that may

help them fulfill their aspiration for economic and social development' (Ibid, 50). That is, eviction is to be handled as an inevitable price, or opportunity, of progress, understood here as agro-industrialization to fuel and energize the global consumer class. In spite of the development industry's new focus on rescuing smallholding, the conditions of rescue assume external inputs to be the answer, rather than providing the conditions (land rights, subsidies) for 'internal' building of ecological wealth as a non-market value (see van der Ploeg 2009).

The global land grab is promoted by, among other organizations, the World Bank, its International Finance Corporation (IFC),²⁰ the International Rice Research Institute (IRRI) of the Consultative Group on International Agricultural Research (CGIAR), the European Bank for Reconstruction and Development (IBRD), and others, with particular focus on Sub-Saharan Africa. The IFC, for example, formed an alliance in early 2009 'with Altima Partners to invest in farming operations and agricultural land in "emerging market countries." The new \$625 million Altima One World Agricultural Development Fund is IFC's largest equity investment in its expanding agribusiness portfolio' (Daniel 2009, 6). The IFC's partner, The Foreign Investment Advisory Service (FIAS), targets 'investment climates' in foreign markets, creating land registries, and easing the process of land titling, leasing and foreign investment – made easier where, as the International Institute for Environment and Development (IIED) found that 'many countries do not have sufficient mechanisms to protect local rights and take account of local interests, livelihoods, and welfare' (Ibid, 17).

A new FIAS initiative, Investing Across Borders (IAB), has conducted project surveys in 87 countries in 2009, targeting information regarding technical regulatory and licensing only. However, it discounts human impact: 'nothing about the IAB indicators seeks to consider the extent to which local populations in these countries will be affected – whether local populations already occupy the land, whether the land provides water supply or grazing lands for local populations, etc.' (Daniel 2010, 15). Furthermore, the

²⁰ IFC expenditures in Sub-Saharan Africa rose from \$167 million in 2003 to \$1.8 billion in 2009 (Daniel 2010, 12).

information compares investment climates and opportunities for competitive purposes. Thus the IFC/FIAS compiled 'A Diagnostic Checklist for Land Markets' that itemizes questions about land holding customs, law, power struggles, state capacity to protect investments and so on, in addition to a Benchmarking FDI Competitiveness Report (2007), noting for Kenya, for example, 'strengths' in the horticulture sector such as 'abundance of arable land,' 'low employment rigidity,' 'low air transit costs for shipments to Amsterdam,' and so on. And for Tanzania, '(t)he country has an abundance of arable land [only 5.5% of which is utilized] from which horticultural operations can be established' (quoted in Daniel 2010, 17-18).

Such development 'services' constitute a broad infrastructural complex supporting land-grabbing – both material and ideological. Insofar as a food regime has an institutional framework, governed by implicit rules appealing to normative understandings of a developmentalist ordering of the world (Friedmann 2005, 234), these 'services,' with emerging 'guidelines,' have all the makings of a re-institutionalization of a global food regime. WTO rules institutionalized a 'cheap food regime' that sanctioned corporate subsidies (hidden in 'boxes'), legitimizing continuation of Northern food dumping from the previous food-aid regime. However, current institutional trends suggest an alternative framework promoting a reversal of patterns of circulation based in Southern agro-exporting of food, fuel, and general biomass. Access to cheap land, water and labor is the foundation of such a regime and its normative vision of agricultural modernization, enhanced food production, smallholder incorporation into value chains, rural employment and smart agro-technologies (McMichael and Schneider 2011). 'Global ecology' sanctions a final enclosure of the commons in the name of food security and saving the planet from emissions and land degradation by under-resourced peasants.

Conclusion

This paper argues that the land grab needs situating in a broader transition between food regimes – from a food-surplus to a food-deficit regime. While the former impoverished peasant cultures via an ethos of cheap food for the world ('food security'),

the latter promises to accelerate dispossession in the name of managing endemic food insecurity ('food crisis') resulting from the previous regime's neglect of domestic food security mechanisms and destabilization of populations, environments and the climate. The land grab is the medium through which the development agencies can renew their legitimacy (appearing to construct acceptable codes of conduct), and through which finance capital can restore profits even as capitalism enters a profound crisis of political legitimacy, and energy and environmental limits.

Restoration of profits depends on a landed frontier of accumulation in the new bio-economy, the basic ingredients of which are indiscriminate crop production via a process of enhanced enclosure of Southern land, accompanied by a normative appeal to securing world food and green fuel supplies at a time of crisis. The Bank's 'agriculture for development' is an afterthought that presents as a new development strategy, even as it sanctions land grabbing for the security of 'capital' in the name of a reformulated global ecology. 'Rational planning of the planet for Northern security' remains the basic rationale, although arguably there is no such security to be had, and the land grab – to the extent that it is incapable of recognizing the salience of low-carbon bio-diverse agriculture – is the ultimate death wish as industrial biofuels and value-added agriculture will not resolve the combined problems of climate change and food insecurity. They will only buy time (and space!) in the short run for political and economic elites and consumers with purchasing power. In this scenario the longer run is destined to be catastrophic.

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