The land and its people

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Land is the ultimate foundation of a society's livelihood, identity and way of life. Many cultures and religions recognize soil as a source of life and prosperity, and have traditions tied to the land, its products and geographic location.

The fraction of land available for agriculture is likely to decline as land use intensifies[1]. The land should therefore be managed with care. Local indigenous communities tend to make good stewards of the land, as they are directly affected by the benefits and environmental impacts of its management[2–4]. Large-scale transnational acquisitions threaten to undermine the ethic of land stewardship by placing the land under the care of managers who make decisions from afar.

Here we argue that even when the original owners of the land make an informed decision to sell or lease the land, and when the land is paid for at market value, large-scale land acquisitions can greatly compromise the food security, economic stability and future livelihoods of local communities.

The global rush for land

Large-scale acquisitions of agricultural land by external investors, be they individuals, corporations or governments, have increased at an unprecedented rate over the last ten years[5,6]. This global rush for land was probably exacerbated by the food crisis of 2007 to 2008, when food prices skyrocketed in response to crop failures, new bioenergy policies and increasing demands for agricultural products by a growing and increasingly affluent global population[7,8]. Corporations began to recognize the potential for high financial returns from agricultural land, and governments started to enhance their food security by purchasing large tracts of agricultural land in foreign countries[6–8].

So far, about 35.6 million hectares of cropland have been acquired by foreign investors worldwide[5], more than twice the area of agricultural land in Germany. The top six target countries are Papua New Guinea, Indonesia, South Sudan, the Democratic Republic of Congo, Mozambique and Brazil. Together, these countries account for 45% of the land sold. The land is expected to be used primarily for agriculture and forestry, although mining, industry, conservation and tourism are also important drivers of these investments[5]. So far, only about 12% of the land acquired for agriculture has been cultivated[5]; in many cases the land remains unused, and simply serves as a development option for investors further down the line.

Local communities lose legal access to their land and its products as a result of these deals. When the transactions take place without the consent of previous land users, or fail to take into account the environmental and societal impacts of the exchange, they are clearly in violation of human rights. Transactions of this kind are often referred to as 'land grabbing'[9]. Here, however, we highlight some of the more general implications of the commodification of land, and so focus on those acquisitions that do not constitute a land grab.

Capital gain and loss

The replacement of a community's natural capital with financial capital compromises the sustainability of that community. Even if the money generated by the sale of the land proves sufficient to sustain the previous land users and improve their quality of life, the situation would still only be considered 'weakly sustainable', as the sell-off of land generates economies that are more vulnerable to uncertainties in the global financial market[10].

Some of the downsides of trading natural for financial capital are illustrated by the case of phosphate mining in Nauru[10], an island in the Pacific Ocean known for its rich deposits of mineral phosphorous. Phosphorous deposits have been aggressively mined over the past few centuries[11] because of the important control exerted by this nutrient on crop productivity. Mining of Nauru's phosphorus deposits commenced soon after their discovery in the early 1900s when the island was under German rule, and continued after the First World War when it passed under the control of Australia, New Zealand and Great Britain. By the time of independence in 1968, more than 34 million tons of phosphate had been extracted and exported from the island[10]. The environmental impacts of mining were disastrous: the top soil was lost, leaving a rocky substrate unsuitable for vegetation growth, and important native animal and plant species disappeared[10] (Fig. 1). Although the exploitation of Nauru's phosphate reserves before its independence is just one of the many cases of 'grabbing' in colonial history[11], the decision to continue with the extraction and sale of phosphate after 1968 was an independent one. Nauruans kept mining the island and used the proceeds from the sale of phosphates to create a trust fund for the island's inhabitants. The income generated by the trust fund rendered the country richer than many other Pacific island states, and enabled them to buy food from abroad[10]. However, at the turn of the century, revenues from the trust fund became insufficient to support the population of the island[12]. As a result, the country was severely hit by the food crisis of 2007 to 2008[13], when the food export bans issued by some governments drove up the cost of food considerably and staples became unaffordable[14]. Because of its remote location, dependence on food imports and lack of agricultural land, Nauru is particularly vulnerable to spikes in food prices, which can expose its population to poverty[15].

The environmental and economic fall-out from the sale of Nauru's natural capital illustrates the main problem with large-scale land acquisitions: whereas the land (if properly managed) remains a steady source of food and other land-based resources for the generations to come, financial capital is prone to inflation, uncertainty and risks. As such, the substitution of land for financial capital leads to an undesirable dependency on financial markets and food commodity imports, both of which are volatile, unpredictable and subject to failure. Furthermore, key exporters will soon have to reduce exports to meet the growing needs of their own burgeoning populations[16]. Reductions in global food exports are therefore becoming a real threat for import-dependent countries.

Figure 1 | Nauru's legacy. The coral pillars represent the remains of Nauru's once-rich phosphate reserves. Intensive mining in the twentieth century, first under foreign rule and then following independence, stripped the country of its natural capital, and rendered the nation dependent on food imports and global market forces.

Traditional tenure and new norms

Traditional land tenure systems, such as the communal property regimes typical of many rural societies around the world, have impeded the sale of land in times of hardship[17]. In a communal land tenure, individuals or families have the right to use and access the land in accordance with a set of norms and regulations of resource governance based on seniority and their place in the community[3], but have no individual property rights, and so are unable to sell the land. Communal tenure therefore spares the land from becoming a commodity. Unfortunately, such communal property regimes can totter and fall under the impetus of the ongoing land rush, as they did in northern Europe more than 200 years ago, when the commons were enclosed and privatized[18].

The sale of large tracts of agricultural land to external parties not only compromises the safeguarding of that land for future generations, but also opens up local economies to the instability of global market forces. Because a free market economy is unable to advocate for the interests of those who have neither power nor a voice in global market dynamics — such as poor populations and future generations[18] — new norms and institutions should be put in place to regulate the ongoing phenomenon of large-scale and long-distance land acquisitions.

There are no generic institutional solutions to the unwanted effects of foreign investments in agricultural land; partnerships that allow the local communities to retain property rights, work on the land and exercise local knowledge seem to be good alternatives. Such arrangements could allow the local communities to sustain land stewardship while maintaining — to some extent — land ownership[8]. ❐

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